

SERVICE MANUAL

R-725/RDS • AV-725 AUDIO/VIDEO PRO-LOGIC RECEIVER



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* A PRODUCT OF AV-725 OMITS ONLY TUNER PART TO R-725

 **Sherwood®**

SAFETY PRECAUTIONS

WARNING

Before servicing this unit, familiarize yourself with the following precautions:

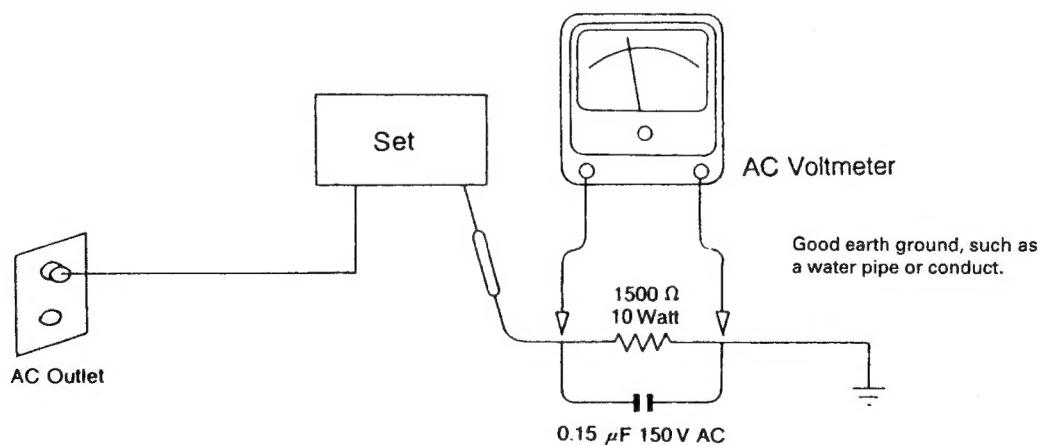
1. Many electrical and mechanical parts in this chassis have special safety characteristics that often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements: electrical components having such features are identified by ! in the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

2. Before returning the set to the customer, always do an AC leakage current check on the

exposed metal parts of the cabinet, such as terminals, screw heads, and metal overlays, to be sure the set is safe to operate. Danger of electrical shock. Plug the AC line cord directly into a 120 V AC outlet (120 V AC version only). (Do not use a line isolation transformer during this check.) Be sure your AC voltmeter has a sensitivity of 5000 Ω per volt or greater. Then connect a 1500 Ω 10 watt resistor, paralleled by a 0.15 μF 150 V AC capacitor, between a known good earth ground (such as a water pipe, or conduit) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of a 1500 Ω resistor and a 0.15 μF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.75V RMS. This corresponds to 0.2 mA AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

At 5000 Ω per volt or greater sensitivity,
the reading should not exceed 0.75 V.



Place the probe on each exposed metallic part.

SPECIFICATIONS

FRONT AMP SECTION

Measuring methods are based on IHF and IEC standard 268-3.

Measurements conditions, unless otherwise noted :

- * Output resistive load : 8 ohms/Both channel driven
- * Tone(Bass, Treble), Balance, EQ control : Center Position, Other SW's : OFF.
- * Nominal input level : 5 mV for MM, 0.5 mV for MC, 500 mV for general purpose inputs.
- * Power figures should be kept minimum 10 min. between 15 and 35 °C.
- * Terminator : 100 ohm for MC, 1 kohm for MM and general purpose inputs.
- * Filter : IHF-A filter * R/O : Rated Output

NO	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	LIMIT	NOMINAL
1	Input Sensitivity	AUX MM	1 kHz		mV	200 ± 50	200 ± 30
			1 kHz		mV	2.5 ± 0.5	2.5 ± 0.3
2	Channel Balance	AUX	1 kHz	R/O TO -40dB	dB	± 3	± 2
			1 kHz	-40 TO -60dB	dB	± 6	± 4
3	Residual Noise	AUX	1 kHz	VOL min.	mV	≤ 1	≤ 7
4	Total Harmonic Distortion	AUX (500mV)	20Hz	R/O 1W	%	≤ 0.2	≤ 0.09
			1kHz	"	%	≤ 0.2	≤ 0.09
			20Hz	"	%	≤ 0.3	≤ 0.2
5	Continuous Average Power at (0.2)% THD	AUX	20Hz	8 ohms	W	130	132
			1kHz	"	W	130	132
			20Hz	"	W	130	132
6	IMD(SMPTE)	AUX(500mV)	60Hz=4	R/O	%	≤ 0.2	≤ 0.09
			7kHz=1	1W	%	≤ 0.2	≤ 0.09
7	S/N RATIO, IHF-A FILTER	AUX(500mV)	1kHz	R/O	dB	≥ 90	≥ 93
			MM(5mV)	R/O	dB	≥ 68	≥ 72
8	Channel Separation	AUX(500mV)	100Hz	R/O -3dB	dB	≥ 45	≥ 55
			1kHz	"	dB	≥ 45	≥ 55
			10kHz	"	dB	≥ 40	≥ 45
9	Function Crosstalk	CD \Rightarrow AUX AUX \Rightarrow MM MM \Rightarrow AUX	1/10 kHz	"	dB	$\geq 60/40$	$\geq 65/45$
			1/10 kHz	"	dB	$\geq 60/40$	$\geq 65/45$
			1/10 kHz	"	dB	$\geq 60/40$	$\geq 65/45$
10	Frequency Response (-3dB)	AUX(500mV)		1W	Hz~kHz	20~50	10~60
11	Tone Control, ± 10 dB	AUX	100Hz	1W	dB	$\pm 10 \pm 2$	$\pm 10 \pm 1$
			10kHz	1W	dB	$\pm 10 \pm 2$	$\pm 10 \pm 1$
12	Subwoofer Out sub-vol +6dB	AUX(200mV)	1kHz	M-Vol Max	V	2 ± 0.5	2 ± 0.3
13	Phono Equalization	PHONO	100Hz	TAPE OUT	dB	$RIAA \pm 1.5$	$RIAA \pm 1$
			10kHz	"	dB	$RIAA \pm 1.5$	$RIAA \pm 1$
14	Input Overload at 0.5% THD	MM	1kHz	TAPE OUT	mV	≥ 120	≥ 140
15	DIN Power at 1% THD	AUX	1kHz	R/O	W	≥ 135	≥ 140
16	Muting Level	AUX(500mV)	1kHz	R/O	dB	≥ 60	≥ 65

REAR AMP SECTION

Measurements conditions : Input level 300mV, Rear level max., Master volume adj. delay time 20ms

NO	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	LIMIT	NOMINAL
1	Power Output 0.7% THD	AUX	1kHz	8ohms	W	≥ 50	≥ 52
2	Total Harmonic Distortion	AUX	1kHz	1W	%	≤ 1	≤ 0.7
3	S/N Ratio IHF-A Filter	DOLBY STADIUM THEATER HALL	AUX	R/O	dB	≥ 55	≥ 63
			AUX	"	dB	≥ 55	≥ 63
			AUX	"	dB	≥ 55	≥ 63
			AUX	"	dB	≥ 50	≥ 63
4	Frequency Response at ± 3 dB (ONLY DOLBY)	AUX	1kHz	1W	Hz~kHz	100~6	80~7

☞ CENTER AMP SECTION

Measurements conditions : Input level 300mV, WIDE mode Center level max., Master volume adj.

NO	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	LIMIT	NOMINAL
1	Power Output at 0.3% THD	AUX	1kHz	8ohms	W	≥130	≥132
2	Total Harmonic Distortion	AUX	1kHz	1W	%	≤0.3	≤0.2
3	S/N Ratio, IHF-A Filter	AUX		R/O	dB	≥73	≥78
4	Frequency Response DOLBY MODE NORMAL	AUX		1W	Hz~kHz	120~20	100~30
	WIDE	AUX		1W	Hz~kHz	60~20	40~30

☞ VIDEO SECTION

NO	DESCRIPTION	INPUT	FREQ.	REMARK	UNIT	LIMIT	NOMINAL
1	Output Level at 75ohms	VCR1(1Vp-p)	1MHz		Vp-p	1±0.2	1±0.1
2	Frequency Response	"	1MHz		Hz~MHz	DC~6	DC~6.3
3	S/N Ratio	"	1MHz		dB	40	45
4	Crosstalk	"	1MHz		dB	40	45

☞ AM SECTION

Measuring methods in conformity with IEC standard 315

Measurements condition AM - MW

* Radio frequency = 1000/999kHz, Audio frequency = 400Hz

* LM : Radio frequency = 207kHz, Audio Frequency = 400Hz

* Reference level = 5 mV/m, 10 mV/m on 50 ohms

* Test point : MW TP1=594 kHz, TP2=999 kHz, TP3=1404 kHz (USA Version)

* Test point : MW TP1=600 kHz, TP2=1000 kHz, TP3=1400 kHz (Europe Version)

* Test point : LW TP1=162 kHz, TP2=207 kHz, TP3=1404 kHz (USA Version)

* Test point : LW TP1=600 kHz, TP2=1000 kHz, TP3=1400 kHz (Europe Version)

NO	DESCRIPTION			VERSION	UNIT	LIMIT	NOMINAL
1	Tuning Cover Range	LOW~HIGH		USA	kHz	520~1710	
	STEP			EUROPE	kHz	522~1611	
				USA	kHz	10	
				EUROPE	kHz	9	
2	Usable Sensitivity	MW	TP1	USA	uV/m	≤800	≤500
			TP2		uV/m	≤800	≤500
			TP3		uV/m	≤800	≤500
		MW	TP1	EUROPE	uV/m	≤800	≤500
			TP2		uV/m	≤800	≤500
			TP3		uV/m	≤800	≤500
3	S/N Ratio	MW		USA	dB	≥35	≥40
				EUROPE	dB	≥40	≥45
4	Total Harmonic Distortion			USA	%	≤2	≤1.0
				EUROPE	%	≤1.5	≤1.0
5	Over Load Distortion 5 mV 80 % MOD				%	≤10	≤5
6	Frequency Response at - 6 dB	MW			Hz	100~2 K	80~2.2K
7	Selectivity 10 kHz/ 9 kHz	MW			dB	≥20	≥25
8	AGC Figure of Merit				dB	≥50	≥55
9	Image Rejection	MW = TP3			dB	≥30	≥35
10	Whistle Modulation Input=1mV/m 21F				%	≤15	≤10
11	Auto Stop Level	MW			uV/m	800(±6dB)	800(±5dB)
12	Tuned Level	MW			uV/m	800(±6dB)	800(±5dB)
13	Output Level				mV	165±50	165±30

FM SECTION

Measuring methods in conformity with IEC standard 315

Measurements condition FM : Radio frequency = 98.1 MHz, Audio frequency = 1kHz

* Reference level = 1mV on (75 ohms, 300 ohms)

* Deviation : MONO = $\pm 75\text{kHz}$, Stereo = $\pm 67.5\text{kHz} \pm 7.5\text{kHz}$ (USA Version)

MONO = $\pm 40\text{kHz}$, Stereo = $\pm 40\text{kHz} \pm 7.5\text{kHz}$ (Europe Version)

* Test Point : TP 1 = 90.1MHz, TP2 = 98.1MHz, TP 3 = 106.1MHz

* Filter = B.P.F at STEREO

NO	DESCRIPTION	VERSION	UNIT	LIMIT	NOMINAL
1	Tuning Range Step	LOW~HIGH AUTO/Man	USA Europe USA Europe	MHz kHz	87.5 ~ 107.9 87.5 ~ 108.0 200 100/50
2	Usable Sensitivity S/N = 30 dB TP 1 TP 2 TP 3 S/N = 26 dB TP 1 TP 2 TP 3	TP 1 TP 2 TP 3 TP 1 TP 2 TP 3	USA Europe	dBf dBf dBf dBf dBf dBf	≤ 17.2 ≤ 17.2 ≤ 17.2 ≤ 20.2 ≤ 20.2 ≤ 20.2 ≤ 14.2 ≤ 14.2 ≤ 14.2 ≤ 17.2 ≤ 17.2 ≤ 17.2
3	Full Limiting Sense	Output = -3 dB	USA Europe	dBf dBf	≤ 15.2 ≤ 20.2 ≤ 12.2 ≤ 17.2
4	Auto Stop Level			dBf	31.2 ± 5
5	Auto Error		USA Europe	kHz kHz	± 20 ± 15 ± 25 ± 20
6	S/N Ratio	MONO STEREO		dB dB	≥ 64 ≥ 60 ≥ 68 ≥ 64
7	Total Harmonic Distortion	MONO STEREO		% %	≤ 0.5 ≤ 0.8 ≤ 0.3 ≤ 0.5
8	50 dB Quieting Sensitivity 46 dB Quieting Sensitivity	MONO STEREO MONO STEREO	USA Europe	dBf dBf dBf dBf	≤ 23.2 ≤ 48.3 ≤ 23.2 ≤ 48.3 ≤ 20.2 ≤ 45.3 ≤ 20.2 ≤ 45.3
9	Channel Separation	100 Hz 1 kHz 10 kHz		dB dB dB	≥ 35 ≥ 40 ≥ 30 ≥ 40 ≥ 45 ≥ 35
10	Frequency Response at ± 1.5 dB			Hz	20~12.5
11	Spurious Response		USA Europe	dB dB	≥ 80 ≥ 80 ≥ 90
12	IF Rejection	TP 1		dB	≥ 70 ≥ 80 ≥ 80
13	Image Rejection	TP 3	USA Europe	dB dB	≥ 60 ≥ 70 ≥ 65 ≥ 80
14	AM rejection Ratio			dB	≥ 50 ≥ 55
15	Capture Ratio			dB	≤ 2.5 ≤ 2
16	Alternative CH Selectivity ± 400 kHz			dB	≥ 45 ≥ 50
17	Output Level	MONO		mV	500 ± 150 50 ± 100
18	RDS Sensitivity		Europe	dBf	≤ 40.2 ≤ 38.2

GENERAL

Power consumption ----- USA/Canada : 4.5A, Europe : 1.100W

Power Supplies ----- USA/Canada : AC 120V, 60Hz

Europe : AC 230V, 50Hz

Dimensions (W×H×D) ----- 440×140×380 mm

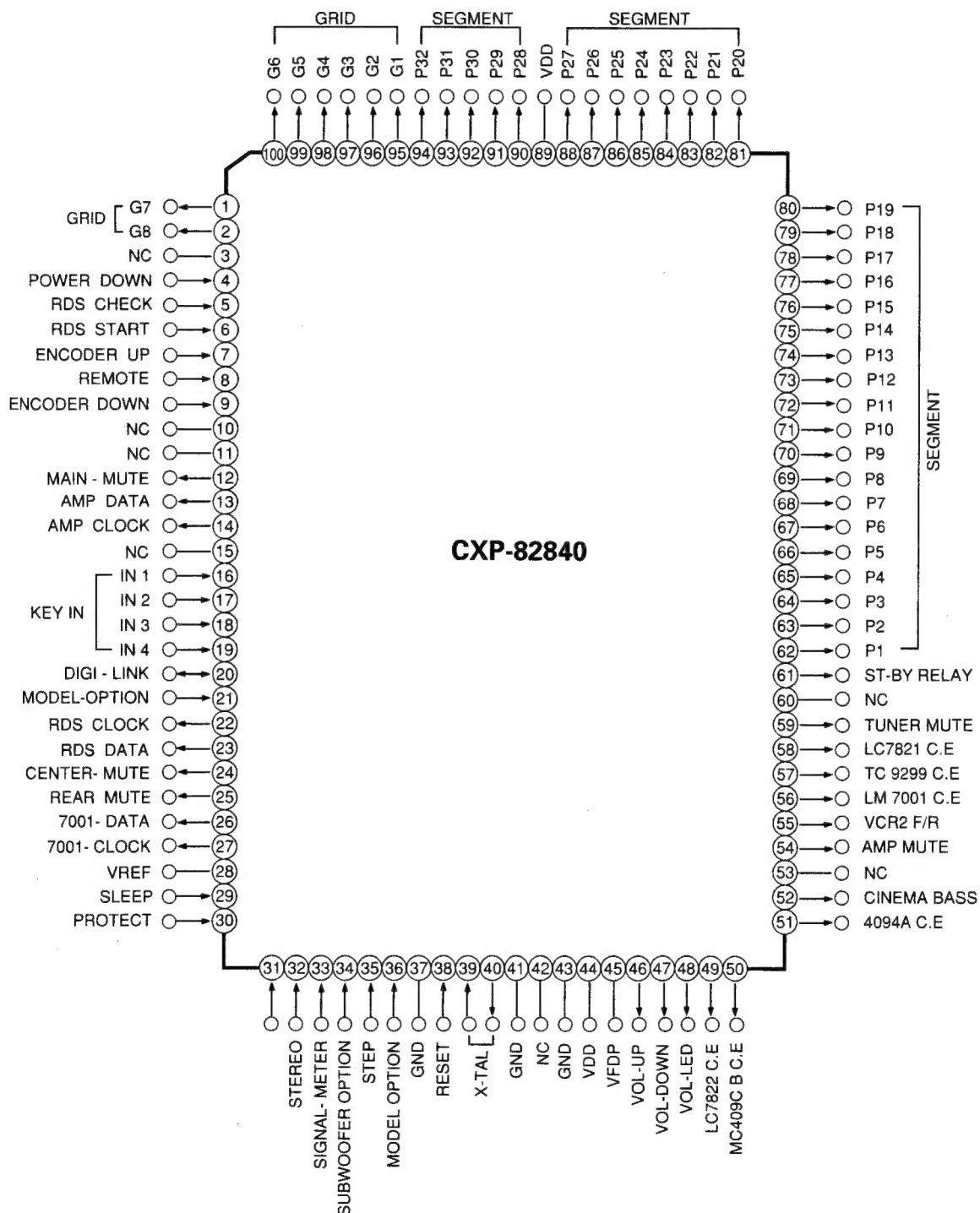
17-5/16×5-1/2×14-15/16 inches

Weight (Net) ----- 15.9 kg (34.3 lbs)

CIRCUIT DESCRIPTION

IC301 : CXP82840

1. Pin Description



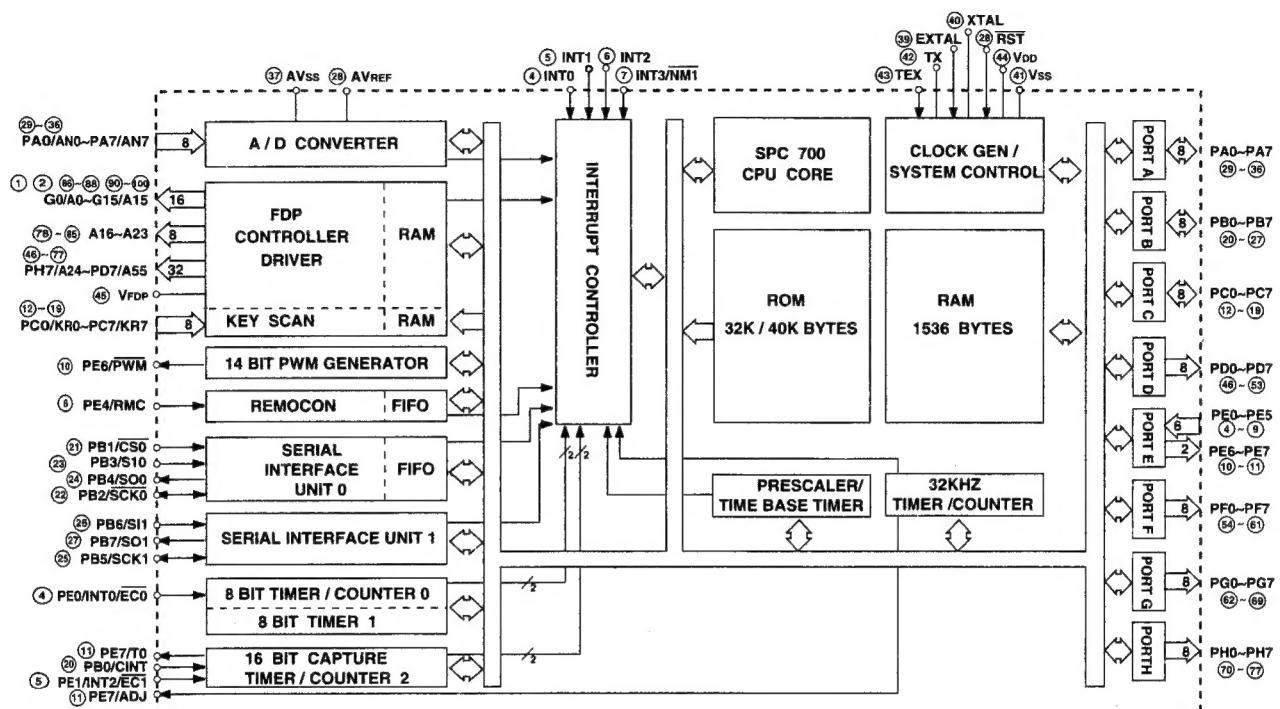
2. Input/Output Terminal Functions

Pin No.	Symbol	Description
1/2	G2/G1	Grid signal output for FIP.
3	NC	Not used.
4	POWER DOWN	Input for power down(Active low).
5	RDS CHECK	Input for RDS check.
6	RDS START	Input for RDS start.
7/9	ENC UP/DOWN	<p>Input for Encoder up and down.</p> <p style="text-align: center;">(C W)</p> <p style="text-align: center;">(C C W)</p>
8	REMOCON	Input for remote control signal. (Active low).
10/11	NC	Not used.
12	MAIN MUTE	<p>Output for main mute.</p> <p>Output is low level under the following conditions.</p> <ol style="list-style-type: none"> 1. When power is turned on or off. 2. When function is changed. 3. When MONO or STEREO is changed. 4. When Low level is inputed to "PROTECTION" port of CPU. 5. When mute signal is received from the commander.
13	DATA	Output datasignal to MC14094, LC7821, LC7822 and TC9299.
14	CLOCK	Output clock signal to MC14094, LC7821, LC7822 and TC9299.
15	NC	Not used.
16~19	KEY IN1~4	Input data of IN1~IN4 for key scan.
20	DIGI LINK	Input/Output for controlling digi-link .
21	MODEL OPTION	Input for selecting Model. ('L'→R525, 'H'→R-725, AV725)
22	RDS CLK	RDS clock signal input for TDA7330B. (This input is used only for R525RDS)
23	RDS DATA	RDS data signal input for TDA7330B. (This input is used only for R525RDS)
24	C-MUTE	<p>Output for center mute.</p> <p>Output is low level under the following conditions.</p> <ol style="list-style-type: none"> 1. When power is turned on or off. 2. When center mode is on or off. 3. When center mode is switched.

Pin No.	Symbol	Description																
24	C-MUTE	<p>4. When test tone mode is on or off, When the channels is changed the test tone mode.</p> <p>5. When Low level is inputed to "PROTECTION" of CPU.</p> <p>6. When mute signal is received from the commander.</p>																
25	S-MUTE	<p>Output for surround mute.</p> <p>Output is low level under the following conditions.</p> <ol style="list-style-type: none"> When power is turned on or off. When surround mode is on or off. When test tone mode is on or off, When the channels is changed the test tone mode. When delay time is changed. When Low level is inputed to "PROTECTION" of CPU. When mute signal is received from the commander. 																
26/27	7001-DATA/CLK	DATA/CLOCK Singnal output for LM7001.																
28	AV REF	Referance voltage of analog A/D converter.																
29	SLEEP OPTION	Input for selecting function. ('H'→St-by, 'L'→Sleep.)																
30	PROTECTION	Signal input for protection wher low level is inputed, it ischinged to STAND-BY mode.																
31	GND	Ground.																
32	STEREO	Input for lighting the ST(Stereo), Inaicator(Active low).																
33	S-METER	Input signal level of tuner.																
34	SUBWOOFER OPTION	Input for selecting subwoofer, when high level is inputed subwoofer volume is operates.																
35	STEP	<p>According to region, input for selecting the frequency bands and steps for FM and AM</p> <p>Settings are as follows</p> <table border="1"> <thead> <tr> <th>REGION</th> <th>FREQUENCY BAND</th> <th>STEP</th> <th>PIN35(IC301)</th> </tr> </thead> <tbody> <tr> <td>USA/ CANADA</td> <td>FM: 87.5~107.9 MHz AM: 520~1710 kHz</td> <td>200 kHz 10 kHz</td> <td>0 V</td> </tr> <tr> <td>EUROPE</td> <td>FM: 87.5~108 MHz AM: 522~1611 kHz</td> <td>50 kHz 9 kHz</td> <td>1 V</td> </tr> <tr> <td>KOREA</td> <td>FM: 87.5~107.9 MHz AM: 522~1611 kHz</td> <td>200 kHz 9 kHz</td> <td>2 V</td> </tr> </tbody> </table>	REGION	FREQUENCY BAND	STEP	PIN35(IC301)	USA/ CANADA	FM: 87.5~107.9 MHz AM: 520~1710 kHz	200 kHz 10 kHz	0 V	EUROPE	FM: 87.5~108 MHz AM: 522~1611 kHz	50 kHz 9 kHz	1 V	KOREA	FM: 87.5~107.9 MHz AM: 522~1611 kHz	200 kHz 9 kHz	2 V
REGION	FREQUENCY BAND	STEP	PIN35(IC301)															
USA/ CANADA	FM: 87.5~107.9 MHz AM: 520~1710 kHz	200 kHz 10 kHz	0 V															
EUROPE	FM: 87.5~108 MHz AM: 522~1611 kHz	50 kHz 9 kHz	1 V															
KOREA	FM: 87.5~107.9 MHz AM: 522~1611 kHz	200 kHz 9 kHz	2 V															
36	SET OPTION	Input for selecting set. (5V→RDS Receiver, 2.5V→Amp, 0V→Receiver)																
37	ADGND	Ground																
38	RESET	Input for resetting CPU. (Active high)																
39/40	X-TAL I/O	Input/Output for crystal oscillator.																
41	GND	Ground.																

Pin No.	Symbol	Description
42	NC	Not used.
43	GND	Ground.
44	VDD	Power supply of CPU(+5V).
45	VFL	-30V Power supply for FIP.
46/47	VOL UP/DOWN	Output data for Master volume control.
48	VOL LED	Output signal for volume LED.
49	CE(7822)	LC7822 chip enable (Surround).
50	CE(4094)	14094 chip enable (Surround).
51	CE(4094)	14094 chip enable (Video).
52	CINEMA-BASS	Output signal for Cinema-Bass function (High Active).
53	NC	Not used.
54	AMP-MUTE	When the power is on, control data output is high after 3 seconds. When the power is off, control data output is "L".
55	VCR2 OPTION	Output signal for VCR2 Inputs. ('H'-Front, 'L'-Rear)
56	CE(7001)	LM7001 chip enable.
57	CE(9299)	TC9299 chip enable. (Surr-Subwoofer Trim)
58	CE(7821)	LC7821 chip enable. (Function select)
59	T-MUTE	Output for tuner mute. Output is high level under the following conditions. 1. When power is turned on or off. 2. When tuner band is changed. 3. When tuning up or down button is pressed. 4. When preset button is pressed. 5. When displayed preset number is changed during memory scan. 6. When Low lever is inputed to "PROTECTION" of CPU. 7. When mute signal is received from the commander.
60	NC	Not used.
61	ST-BY	Output for driving power relay. (Active high)
62-70	S1-S9	Segment 1 - Segment 9.
71-81	S10-S20	Segment 10, Key check 11 - Segment 20, Key check 1.
82-88	S21-S27	Segment 21 - Segment 27.
89	VDD	+5V power supply.
90-94	S28 - S32	Segment 28 - Segment 32.
95-100	G8-G3	Grid 1 - Grid 5.

3. Block Diagram



4. Key Matrix

	Key Scan 2 Pin 80	Key Scan 3 Pin 79	Key Scan 4 Pin 78	Key Scan 5 Pin 77	Key Scan 6 Pin 76	Key Scan 7 Pin 75	Key Scan 8 Pin 74	Key Scan 9 Pin 73	Key Scan 10 Pin 72	Key Scan 11 Pin 71
Key in 1,Pin 16	Station Name	Center Level Down	Band	Tuning up	Memory Enter	7	4	Stereo	Search	Sleep
Key in 2,Pin 17	VCR 1 REC	Center Level Up	PTY Select	FM Mode	Tuning Down	8	3	Pro Logic	EON. TA	OFF
Key in 3,Pin 18	Tape2, Monitor	—	Stadium	Rear Level Down	0	9	2	Hall	EON. PTY	1
Key in 4,Pin 19	Video Labels	Center Mode	Cinema Bass	Rear Level Up	Frequency	6	5	Theater	Display	St-by

ALIGNMENT PROCEDURES

TUNER

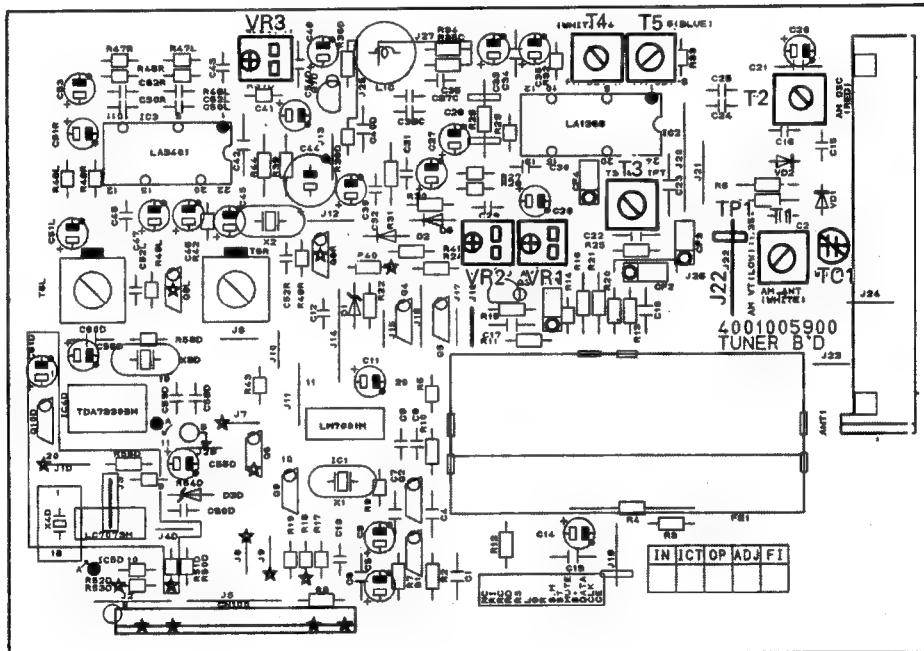
1. Equipment Required

- AM Standard Signal Generator (AM SSG)
 - Oscilloscope
 - AC Voltmeter
 - FM Standard Signal Generator (FM SSG)
 - Stereo Modulator
 - Audio Generator
 - Distortion Meter
 - DC Voltmeter
 - Frequency Counter

Note : Disconnect external FM antenna prior to alignment.

2. Alignment

2-1. Alignment and Test Point



2-2. AM Alignment

- Output of signal generator should not be greater than necessary to obtain an optimum output reading.
 - Signal generator modulation : 30 %
 - RF signal frequency : 400 Hz
 - Switch : Press the BAND button to AM

Step	Subject	Signal Generator Frequency	Set Frequency Setting	Equipment Connection	Adjustment Point	Adjust for
1	Tuning Voltage	520kHz (522kHz)	520kHz 1) (522kHz)	DC Volt meter to J22 (TP1)	T2 AM OSC(R)	DC1.32V±135V
2	RF Tuning	600kHz (594kHz)	600kHz 1) (594kHz)	AC voltmeter and oscilloscope to speaker terminal of L or R channel	T1 MW ANT(W)	Maximize audio output
		1400kHz (1404kHz)	1400kHz 2) (1404kHz)		TC1	

3	IF	1000kHz (999kHz)	1000kHz (999kHz)	Ac voltmeter and oscilloscope to speaker terminal of L or R channel	T3 AM IFT	Maximize audio output
4	Tuned Level	1000kHz (999kHz) 800 μ V/m	1000kHz (999kHz)		VR1	"Tuned" flag in the FL display light on

3-3. FM Alignment

- Output of signal generator should not be greater than necessary to obtain an optimum output reading.
- Signal generator deviation : USA/Canada/Korea : 75kHz. Europe : 40kHz
- RF signal frequency : 1 kHz
- Switch : Press the BAND button to FM and the FM MODE button to MONO

Step	Subject	Signal Generator Frequency	Set Frequency Setting	Equipment Connection	Adjustment Point	Adjust for
1	Tuning Band Width	98.1MHz (98MHz)	98.1MHz (98MHz)	DC Volt meter to R26(PCB1)	T4	Zero reading on DC Volt meter
2	THD	98.1MHz (98MHz)	98.1MHz (98MHz)	Distortion meter to TAPE OUT jack of L or R channel	T5	Minimize distortion
3	Tuned Level	98.1MHz (98MHz) SSG output level : 10 μ V/m	98.1MHz (98MHz)		VR2	"Tuned" flag in the FL display light on

3-4. MPX Alignment

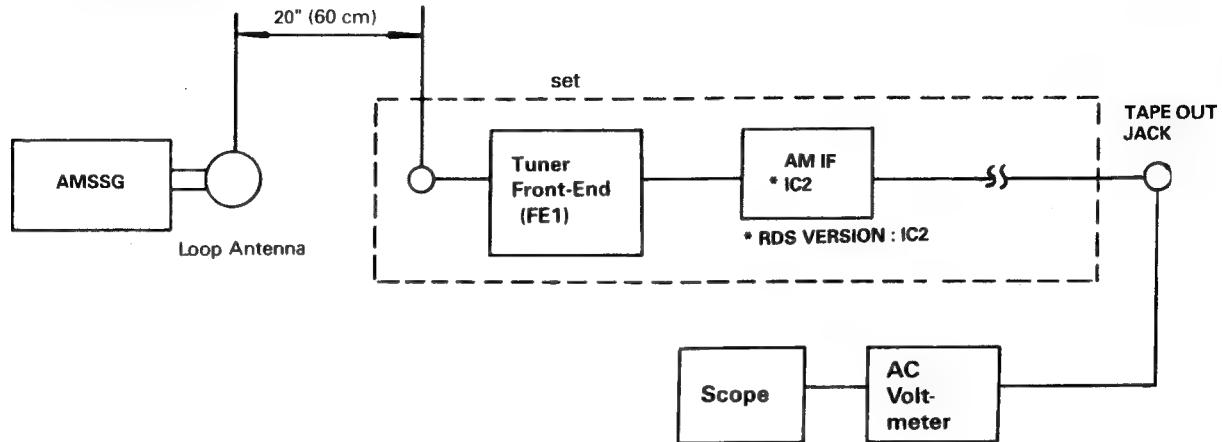
- Signal generator frequency : 98 MHz
- Signal generator deviation : USA : 75kHz. Europe : 40kHz
- RF signal frequency : 1 kHz
- Signal generator output level : 1000 μ V/m
- Connect signal generator to FM antenna terminal through FM dummy antenna (75 Ω)
- Switch : Press the BAND button to FM and the FM MODE button to STEREO

Step	Subject	19 kHz Modulation Level	Signal Generator Setting	Equipment Connection	Adjustment Point	Adjust for
1	Separation R → L	8 % Modulation	Pilot on	AC voltmeter to speaker terminal of R channel	VR3	Set AC voltmeter to 0 dB
				AC voltmeter to speaker terminal of L channel		AC voltmeter reading should be at least 40 dB below
2	Separation L → R	8 % Modulation	Pilot on	AC voltmeter to speaker terminal of L channel	VR3	Set AC voltmeter to 0 dB
				AC voltmeter to speaker terminal of R channel		AC voltmeter reading should be at least 40 dB below

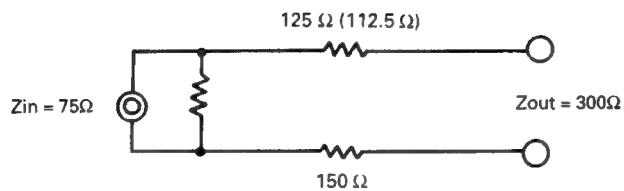
If you could not obtain -40 dB readings in steps 1 and 2, readjust VR3 until you obtain -40 dB readings.
Nominal is -45 dB. (Europe: Nominal -42 dB, Limit -37 dB)

4. Equipment Connection

4-1. AM Alignment Connection

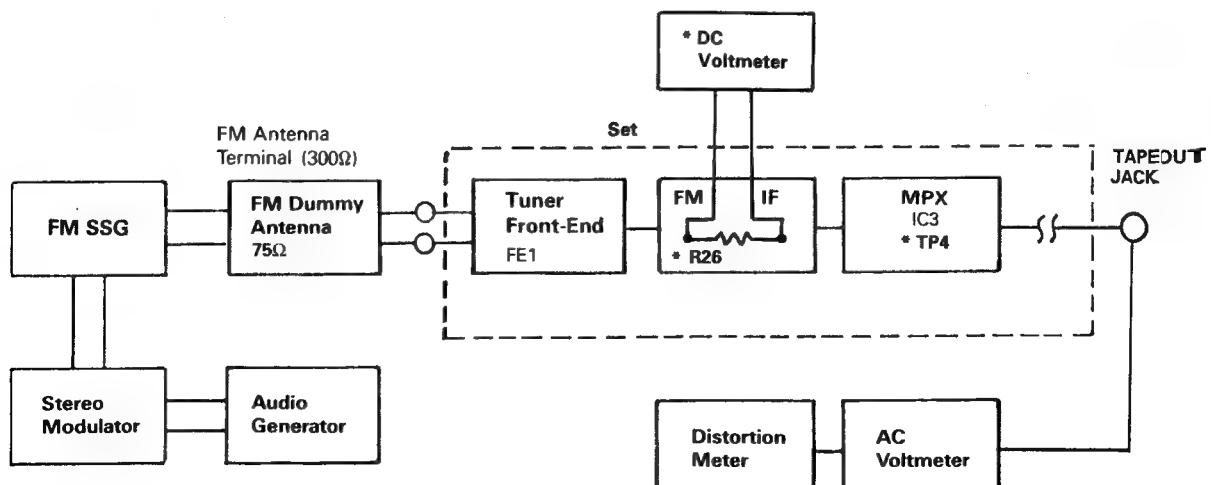


4-2. FM Dummy Antenna



FM Dummy Antenna to 300Ω Antenna terminal of system.

4-3. FM RF/IF and MPX Alignment Connection



TROUBLESHOOTING

Symptom	Cause and Remedy
Receiver inoperative. (FL indicator does not light.)	A) Faulty AC power cord. Replace. B) Defective the power switch. Replace. C) Broken wire in the power transformer. Replace. D) Blown fuse. Replace the fuse.
Fuse blows when power is turned on.	A) Defective power transformer. Replace. B) Short on the primary or secondary of the transformer circuitry. Repair the short. C) Damaged rectifier D105-D112 or damaged transistor Q215L/R/C/SL, Q216L/R/C/SL. D) Short circuit in the amplifier circuit. Repair the shorted component(s) in the amplifier circuit.
Power indicator lights but no sound from both channels.	A) Defective in transistor Q215L/R, Q216L/R on the AMP302 Biard. B) Pulled out of correct speaker switch.
One channel does not work when volume is at maximum with a test signal applied to the center terminal of volume control of the dead channel.	A) Defective in transistor Q215L/R or Q216L/R on the AMP302 Board. Replace the defect. B) Break in copper foil of printed circuit board. Repair the defect. C) Short in speaker output terminal. Repair or replace.
Speaker works normally but headphones inoperative.	A) Headphone plug does not match with jack. Replace the jack. B) Defective resistor R701L/R. Replace.
FM inoperative	A) Defective front-end (FE). Replace. B) Defective FM switch. Replace the switch. C) Defective transistor Q3 and ICS (IC2,IC3). Replace the defective transistor or IC(s). D) Defective coil T4, T5. Replace the coil(s). E) Defective lead-in. Repair or replace the lead-in. F) Ceramic filters CF1, CF3 defective. Replace the defective ceramic filter(s).
Poor multiplex separation.	A) Improper adjustment. Readjust VR3. B) IC3 defective. Replace. C) Variable resistor VR3 defective. Replace the variable resistor.
FM volume is insufficient.	A) If volume from both L and R channels is not loud enough : Front end section defective. Faulty IC2, Coil T4 or T5. If sound of one channel is not loud enough : Defective VR3.

Symptom	Cause and Remedy
STEREO indicator does not light.	A) Defective indicator in FL. Replace. B) Improper adjustment of VR2 of tuner board. Make readjustment. C) Defective IC2. Replace the defective component.
FM Mono has no effect.	A) Defective FM MODE switch. Replace.
AM inoperative.	A) Damaged IC2 of tuner Board. Replace. B) Defective T1, T2, T3 or CF4 of Tuner Board. Replace the defective component(s). D) Defective varicap diodes VD1 or VD2. Replace varicap diods(s). E) Damaged AM loop antenna. Repair or replace.
Bass control has no effect.	A) Variable resistor BASS defective. Replace.
Treble control has no effect.	A) Variable resistor TREBLE defective.
Auto tune inoperative. (UP/DOWN)	A) Poor contact in Up/Down key. Repair or replace. B) Defective IC301. Replace. C) Defective tuner Circuit components. Replace. D) In case of FM only, improper adjustment of FM front-end. Readjust.
Manual tune inoperative. (UP/DOWN) (AM or FM)	A) Poor contact in Up/Down key. B) Defective IC301. Replace.
Memory setting inoperative.	A) Poor contact in memory keys 1-10. Replace the defective component. B) Defective IC301. Replace the defective component.
FL inoperative.	A) FL defective. Replace. B) Defective IC301. Replace. C) Defective X-TAL 301. Replace.
Noisy volume control.	A) Defective volume. Replace.
Remote Control Unit inoperative.	A) Weak battery. Replace. B) Defective. Replace. C) Defective IC301 (FRONT Board) Replace.

MECHANICAL PARTS LIST

Ref. No	Description	Part No.	Q'ty	Version	Ref. No	Description	Part No.	Q'ty	Version
	PACKAGE				56	HOLDER PCB	4320044751010	1	
	BOX CARTON	6017040990160	1	D/RDS	57	TERMINAL SPEAKER, 4P	G61204030000B	1	
	BOX CARTON	6017040990190	1	A	58	TERMINAL SPEAKER, 2P	G611040310000	1	
	POLY BAG	6330040092010	1		59	TERMINAL SPEAKER, 8P	G614081036000	1	
	FILM SOFT PE	6320040052010	1		60	BUSHING TERMINAL	2410040270010	14	D/RDS
	CUSHION PLOY	6230042794010	1		61	GROUND TERMINAL	3790000090000	1	
	ACCESSORIES				62	CHASSIS BACK	3207042746010	1	K
	ANTENNA WIRE DIPOLE	E605010010000	1		(62)	CHASSIS BACK	3207042746020	1	A
	ANTENNA LOOP	E6010101000000	1		(62)	CHASSIS BACK	3207053166010	1	D
	MATCHING TRANS	L109284007100	1		63	STOPPER CORD	4380040162010	1	RDS
	COMMANDER ASSY	830004025X010	1		64	CORD AC POWER	L061041210010	1	A
	BATTERY 1.5V AA (R6M)	G670001R50010	2		65	CORD AC POWER	L061040421040	1	D/RDS
	MANUAL INSTRUCTION	5707045950010	1	D/RDS	(65)	CORD AC POWER	L061041220010	1	K
	MANUAL INSTRUCTION	5707046390010	1	K	66	COVER TOP	3000045396010	1	A/K
	MANUAL INSTRUCTION	5707046390030	1	A	(66)	COVER TOP	3000045406050	1	D/RDS
	CABINET & CHASSIS				67	BRACKET PCB	4010056216010	1	
1	PANEL FRONT	3067043468050	1	A/K	68	JACK PHONE (G)	G402040161330	1	
(1)	PANEL FRONT	3067046128010	1	D	69	HOLDER FAN	4320044706010	1	
(1)	PANEL FRONT	3067046138010	1	RDS	70	DC-BRUSHLESS FAN	G720040030020	1	
2	KNOB MAIN	5087040768010	1		71	CLAMPE WIRE	4330040213010	2	
3	KNOB ENCODER	5087040778010	1		72	FELT BUFFER	4050045669010	1	A/K
4	KNOB ROTARY(A)	5097050641010	3		SW1	SWITCH POWER	G000041610000	1	D/RDS
5	BADGE, Sherwood	5637040591010	1		SW2/SW3	SWITCH PUSH	G000041170000	2	
6	LED GUIDE	4350041551010	1		SW4	SWITCH TACT	G180040500010	1	A/K
7	CAP DECORATION	5127040931010	1	A/K	SW5-SW21	SWITCH TACT	G180040500010	17	
(7)	CAP DECORATION	5127040931020	1	D/RDS	SW22-SW26	SWITCH TACT	G180040500010	5	RDS
8	WINDOW FL	5077040063010	1	A/K	SW27	SWITCH TACT	G180040500010	1	A/K
(8)	WINDOW FL	5077040073010	1	D/RDS	SW28-SW43	SWITCH TACT	G180040500010	16	
9	BODY FRONT	3417040721010	1	A/K	VR1	VOULME MAIN	C495145300010	1	
(9)	BODY FRONT	3417040721020	1	D	VR2	VOULME BLANCE	C450042050000	1	
(9)	BODY FRONT	3417040731010	1	RDS	VR3/VR4	VOULME BASS/TREBLE	C450042060000	2	
10	JACK RCA, 3P	G6060403000000	1		VR5	VOULME ENCODER	C450042030010	1	
11	BRACKET JACK SWITCH	4010043616010	1			HARDWARE KIT			
12	BUTTON PUSH	5090066821010	2		S1/S2	SCREW #2FTC 3×8B	B010530083F10	2	
13	INDICATOR STANDBY	5160040643010	1		S3-S55	SCREW #BTT 3×8B	B020030083B10	53	
14	BUTTON STANDBY	5090059231010	1		S56-S69	SCREW #B WPTT 3×6Y	B020030061W10	14	
15	BUTTON POWER	5090059071010	1	A/K	S70-S79	SCREW #2 BTT 3×8B	B020030083B10	10	
16	BUTTON POWER	509005399101A	1	D/RDS	S80-S104	SCREW HEATSINK	1507041146010	25	
17	HOLDER FL	4320040841010	2		S105	SCREW GUIDE(A)	1507041456010	1	
18	SHIELD FENCE	3070044576010	1		S106/S107	SCREW GUIDE(B)	1507041446010	2	
19	CHASSIS FRONT	3210041046010	1		S108-S112	SCREW #B BTT 3×8B	B020030083B10	5	
20	COVER BOTTOM	4310041996020	1		S113	SCREW GROUND	1507040996010	1	
21/22	FOOT AL	4007041021010	2		S114-S131	SCREW #B TTT 3×8B	B020030083B10	18	
23/24	FOOT PL	4000040201010	2		S132	SCREW GROUND	1507040996010	1	
25	FRAME RIGHT	3200047716010	1		S133-S140	SCREW #B TTT 3×8B	B020030083B10	8	
26	CUSHION FL B'D	4050042265010	2		S141-S144	SCREW GROUND	1507040996010	4	
27/28	HEATSINK, REG TR	2120044338010	2		S145-S148	SCREW WSAM 4×8B	B020940083W10	4	
29	HEATSINK, REG TR	2120044358010	1		S149-S154	SCREW BSAM 4×8B	B020940083B10	6	
30-36	HEATSINK, REG TR	2120044338010	7		S155-S157	SCREW #B TTT 3×8B	B020030083B10	3	
37	FASTENER	4420040323010	2			MISCELLANEOUS			
38	SUPPORTER PCB	4420010153010	2			POWER TRANS, 230/50	8200281016870	1	D/RDS
39	HEATSINK POWER	2120044958010	1			POWER TRANS, 120/60	8200281012670	1	A
40	FRME LEFT	3200047706010	1			POWER TRANS, 220/60	8200281012770	1	K
41	INSULATION COVER	1240043892010	1			SPONGE RUBBER	4050045095010	1	
42	AC OUTLET	G435040070000	1	A		CARD CABLE	L301186213590	1	
43	AC OUTLET	G435040110000	1	D/RDS					
(43)	AC OUTLET	G435000160010	1	K					
44	JACK MULTI ROOM	G402042070000	1	A					
45	JACK RCA, 3P	G606300395020	1						
46	JACK RCA, 2P	G601200900020	1	A/D/RDS					
(46)	JACK RCA, 3P	G606300390020	1	K					
47	JACK RCA, 3P	G606300390020	1						
48	JACK RCA, 9P	G607901500010	1						
49	JACK RCA, 4P	G602400910010	1						
50	JACK RCA, 6P	G603600920020	1						
51	JACK RCA, 2P	G601200440020	1						
52	JACK RCA, 6P	G603600920040	1						
53	JACK RCA, 6P	G603600920020	1						
54	ANTENNA TERMINAL	G590040470000	1	A/K					
(54)	ANTENNA TERMINAL	G59004046000A	1	D/RDS					
55	JUMPER PLUG	L063040750000	5						

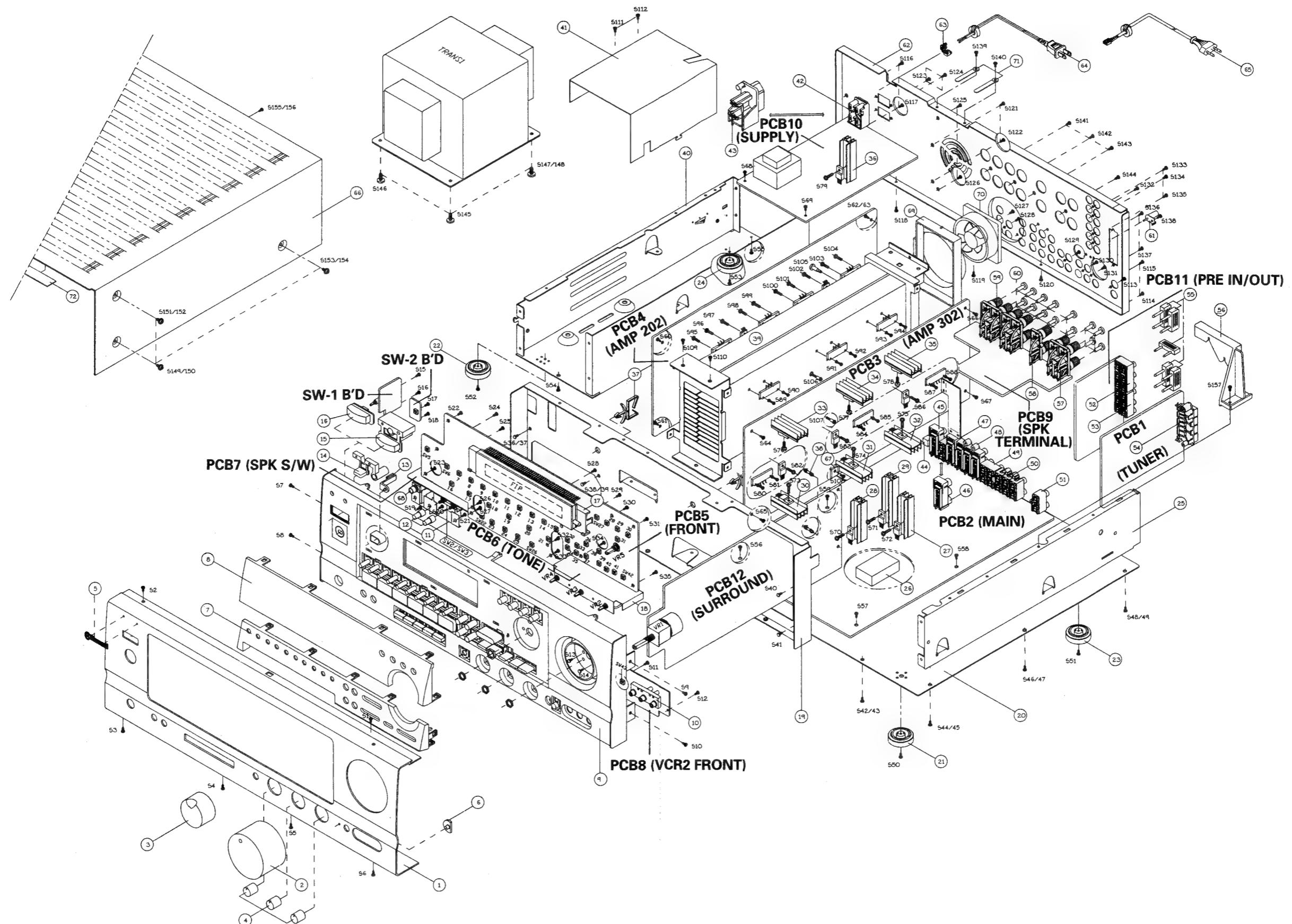
* Parts with blank version are available in common.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol Δ in the parts list are of special significance to safety. When replacing a component identified with Δ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

EXPLODED VIEW

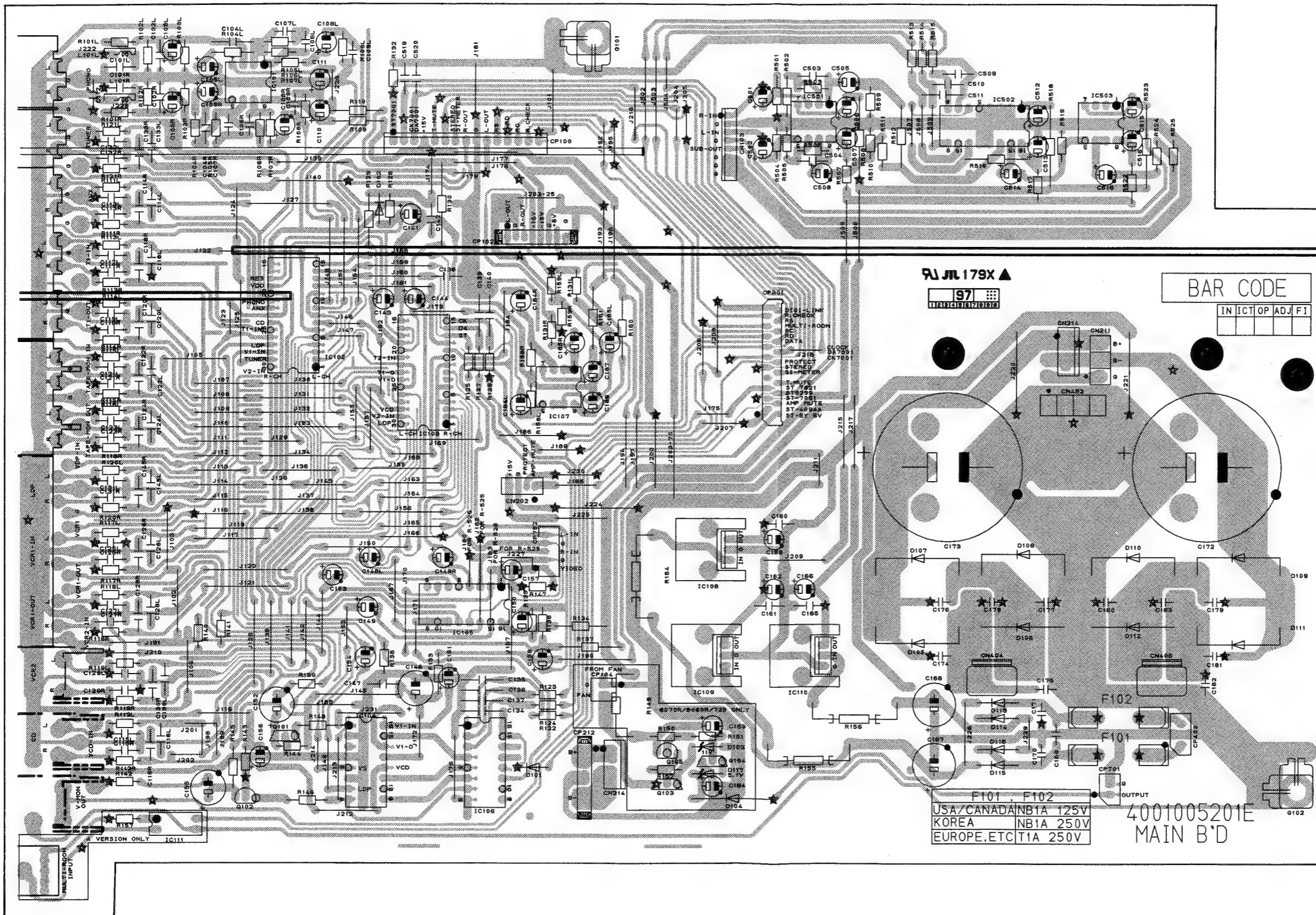
Model No. : R-725/RDS · AV-725



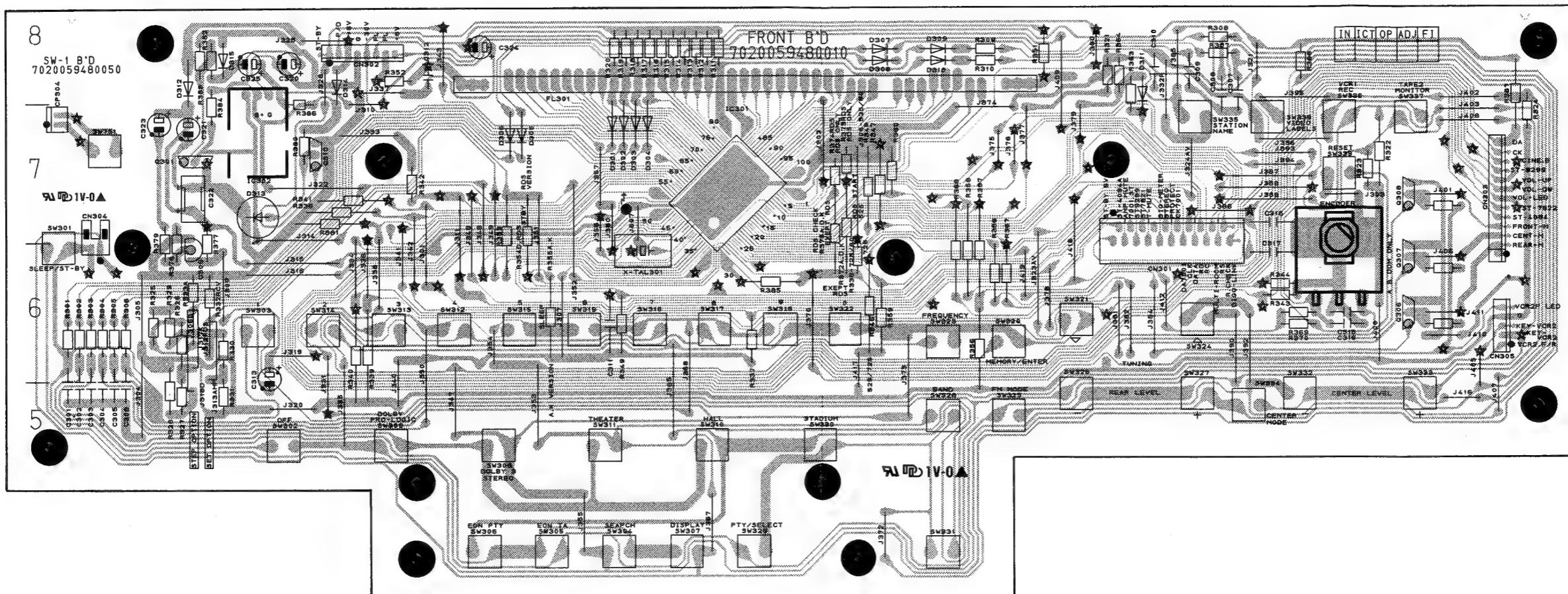
PRINTED CIRCUIT BOARDS

Model No. : R-725/RDS · AV-725

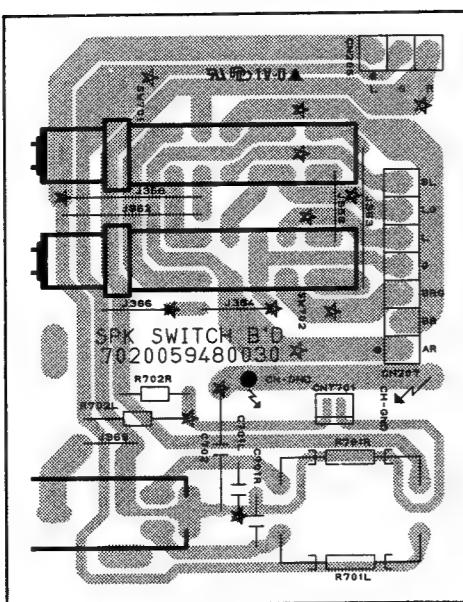
PCB2 (MAIN)



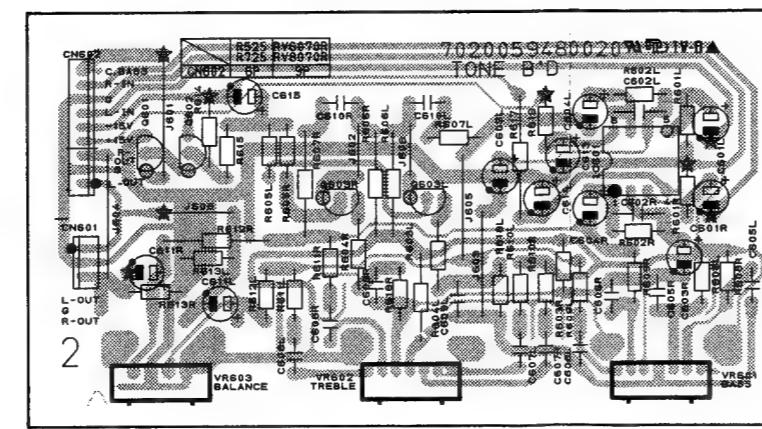
PCB5 (FRONT)



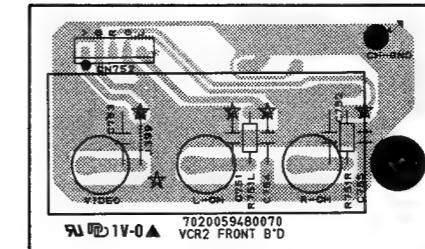
PCB7 (SPK SWITCH)



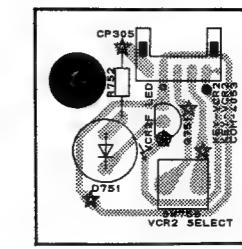
PCB6 (TONE)



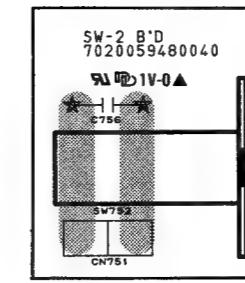
PCB8 (VCR2 FRONT)



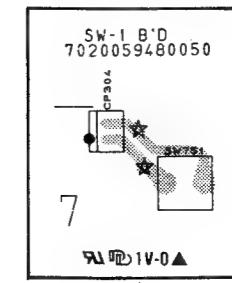
VCR2 SELECT B'D



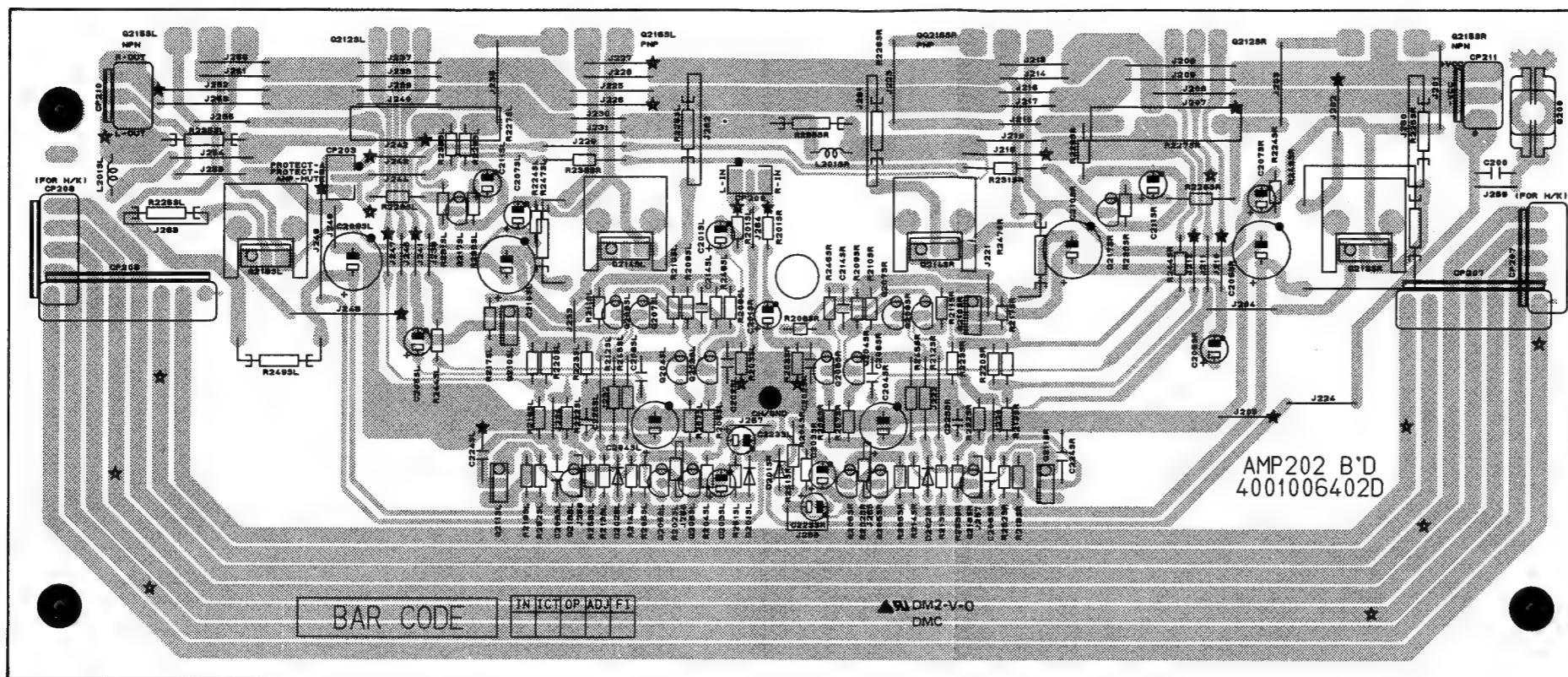
SW-2 B'D



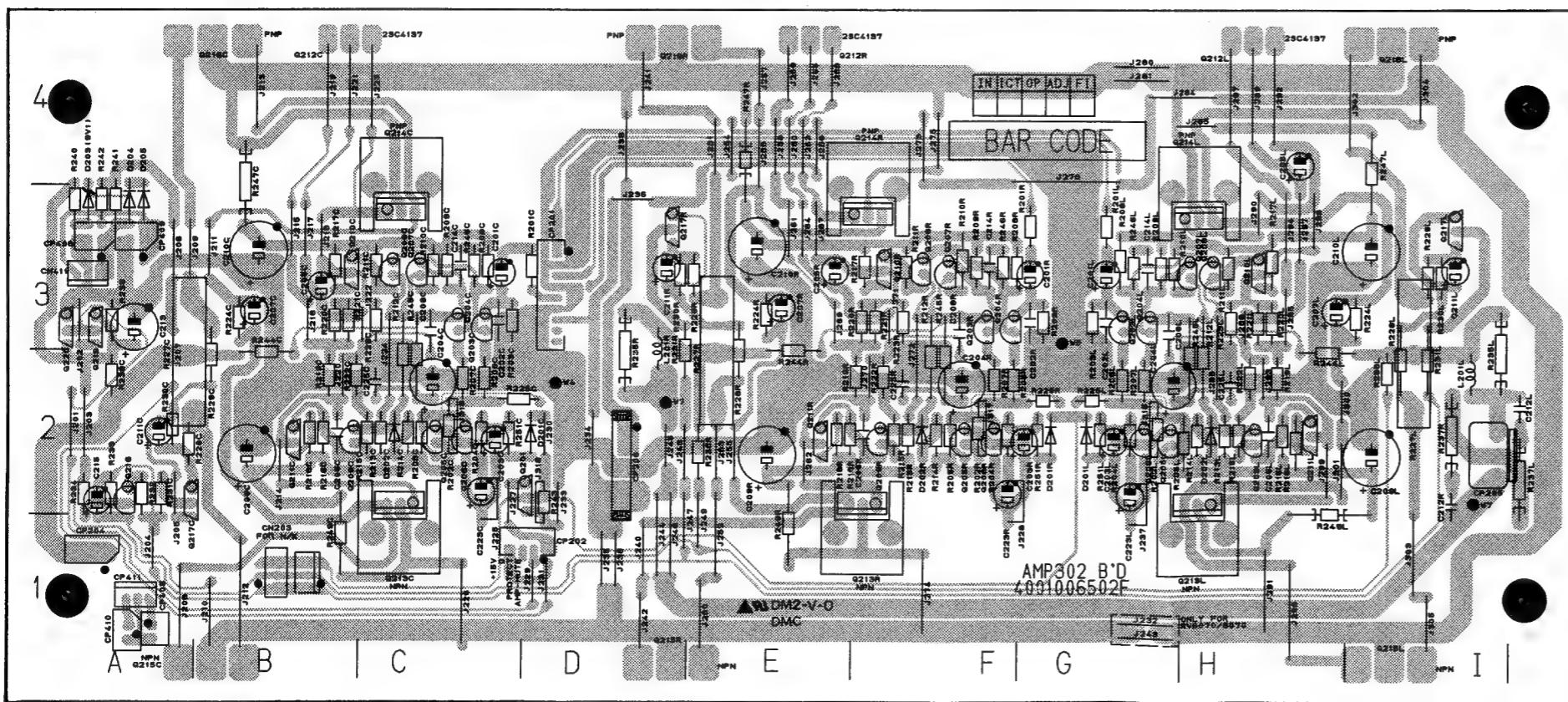
SW-1 B'D



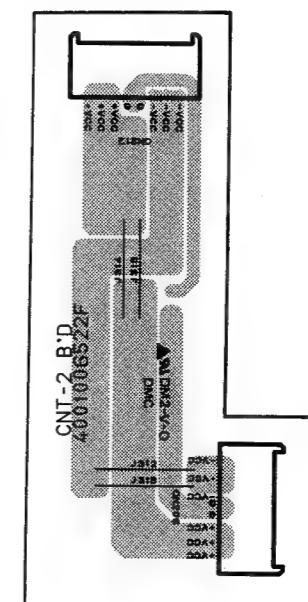
PCB4 (AMP 202)



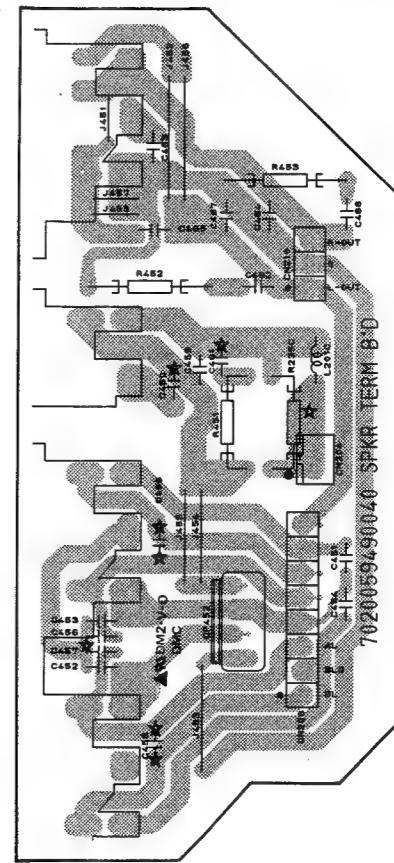
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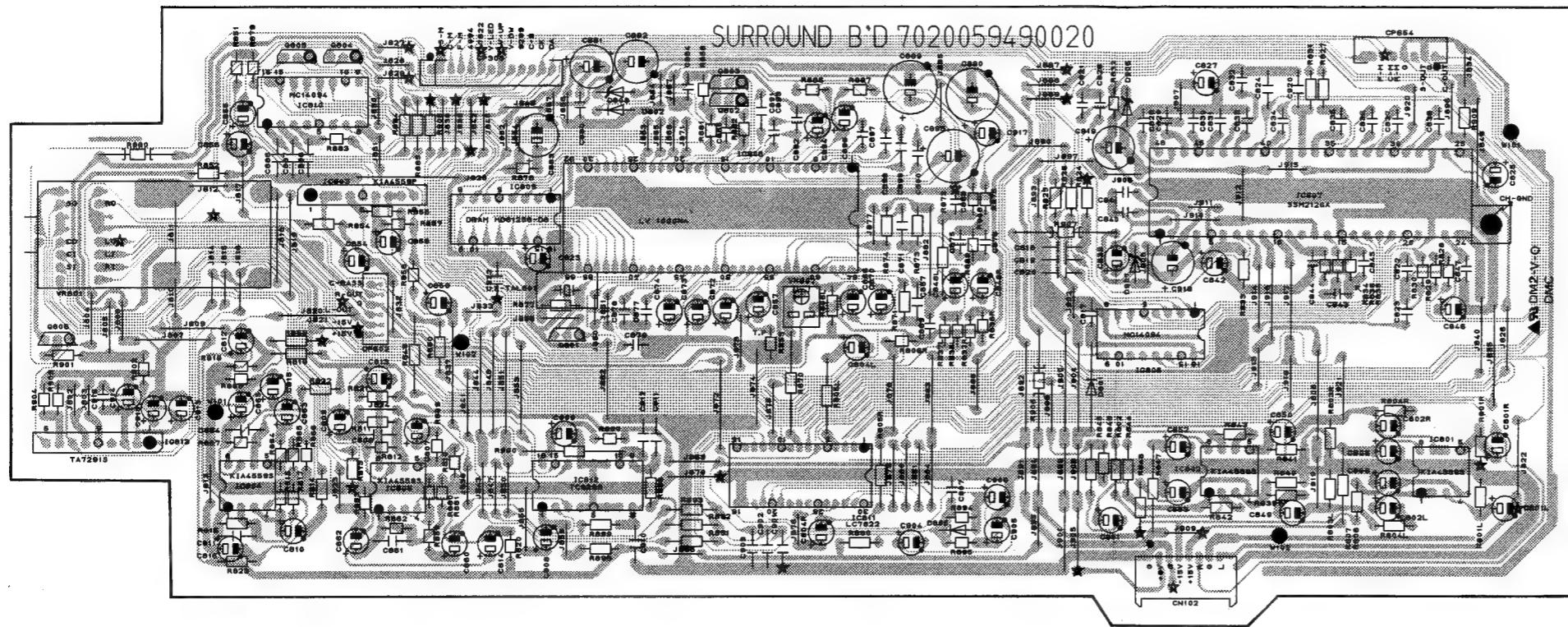
CNT-2 B'D



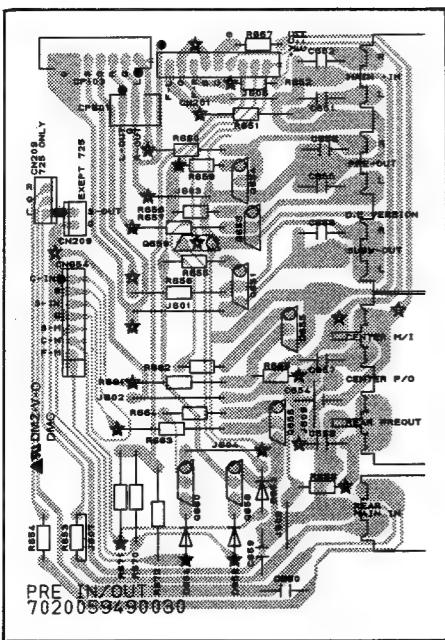
Model No. : R-725/RDS · AV-725
PCB9 (SPK TERMINAL)



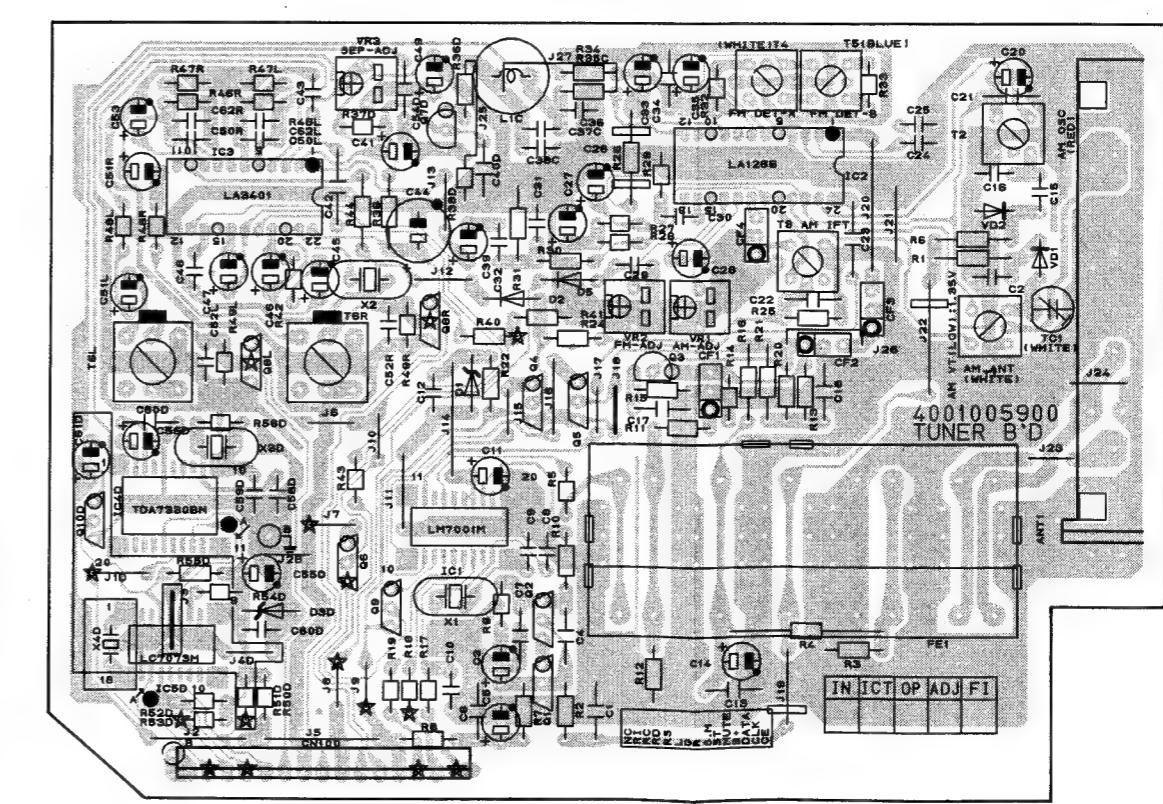
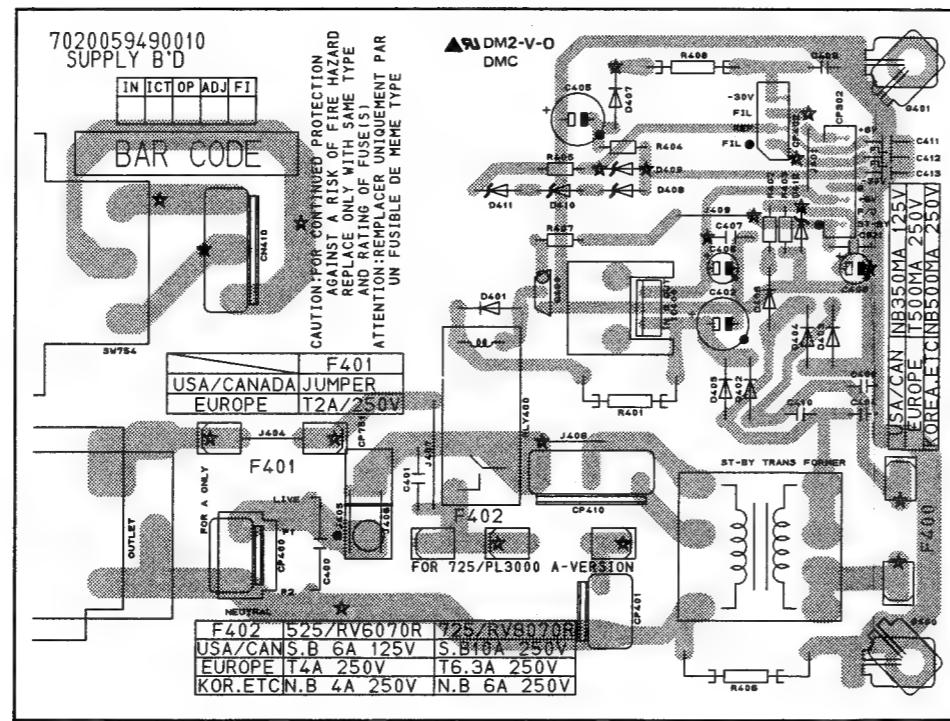
PCB12 (SURROUND)



PCB11 (PRE IN/OUT)



PCB10 (SUPPLY)



ELECTRICAL PARTS LIST

Ref. No.	Description	Part No.	Q'ty	Version	Ref. No.	Description	Part No.	Q'ty	Version	Ref. No.	Description	Part No.	Q'ty	Version	Ref. No.	Description	Part No.	Q'ty	Version																																																																																																																																																																																																																																																																																														
PCB1	ASSEMBLY P.C.B. BOARD TUNER (NON RDS VERSION)				R32	CERAMIC TUBULAR	0.022 μ F	25 V	D005223574530	1	R33	CERAMIC TUBULAR	0.047 μ F	50 V	Z D004473097060	1	R34	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R35	CERAMIC TUBULAR	0.022 μ F	25 V	M D005223574530	1	R36	CERAMIC TUBULAR	0.01 μ F	16 V	D005103773530	1	R37	CERAMIC TUBULAR	0.01 μ F	16 V	D005103773530	1	R38	CERAMIC TUBULAR	0.01 μ F	16 V	J C006001016P520	1	R39	CERAMIC TUBULAR	0.01 μ F	16 V	J C006001016P520	1	R40	CERAMIC TUBULAR	0.01 μ F	16 V	J C006001016P520	1	R41	CERAMIC TUBULAR	0.01 μ F	16 V	J C006002236P520	1	R42	CERAMIC TUBULAR	0.01 μ F	16 V	J C006003326P520	1	R43	CERAMIC TUBULAR	0.01 μ F	16 V	J C006002236P520	1	R44	CERAMIC TUBULAR	0.01 μ F	16 V	J C006004736P520	1	R45	CERAMIC TUBULAR	0.01 μ F	16 V	J C006004736P520	1	R46	CERAMIC TUBULAR	0.01 μ F	16 V	J C00600516P520	1	R47	CERAMIC TUBULAR	0.01 μ F	16 V	J C00600516P520	1	R48	CERAMIC TUBULAR	0.01 μ F	16 V	J C00600621P520	1	R49	CERAMIC TUBULAR	0.01 μ F	16 V	J C00600726P520	1	T1	AM-ANT	D304584300000	1	T2	AM-OSC	D940111027000	1	T3	AM-IFT	D950010050000	1	T4	FM-DET-A	D970010040000	1	T5	FM-DET-B	D970010060000	1	T6L/R	MPX(19/38kHz)	E401500100000	2	COILS																																																																																																																																																																								
C1	CERAMIC TUBULAR	0.022 μ F	25 V	D005223574530	1	C2	CERAMIC TUBULAR	0.047 μ F	50 V	Z D004473097060	1	C3	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C4	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C5	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C6	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C7	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C8	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C9	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C10	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C11	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C12	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C13	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C14	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C15	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C16	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C17/C18	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	2	C20	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C21/C22	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	2	C23	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C24/C25	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C26	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C27	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C28	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C29	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C30	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C31	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C32	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C33	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C34	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C35	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C36	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C37	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C38	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C39	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C40	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C41	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C42	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C43	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C44	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C45	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C46	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C47	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C48	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C49	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C50L/R	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	2	C51L/R	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	C53	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	CERAMIC FILTERS																	
CF1	10.7MS3GH	E430107000150	1	C17/C18	10.7MS3GH	E430107000150	1	C20	10.7MS3GH	E430107000150	1	C21/C22	10.7MS3GH	E430107000150	1	C23	10.7MS3GH	E430107000150	1	C24/C25	10.7MS3GH	E430107000150	1	DIODES																																																																																																																																																																																																																																																																																									
D1	ZENER, UZ 5.1V BSB	K06005R114520	1	D2	1N4148, SWITCHING	K00414801520	1	D5	1N4148, SWITCHING	K00414801520	1	VD1/VD2	VARACTOR, SVC321 SPA-C	K080032100520	2	INTEGRATED CIRCUITS																																																																																																																																																																																																																																																																																																	
IC1	ASSEMBLY P.C.B. BOARD TUNER (RDS VERSION)	PCB1	J124700100010	1	IC2	AM-ANT	D304584300000	1	IC3	AM-OSC	D940111027000	1	IC4	AM-IFT	D950010050000	1	IC5	FM-DET-A	D970010040000	1	IC6	FM-DET-B	D970010060000	1	IC7	MPX(19/38kHz)	E401500100000	2	TRANSISTORS																																																																																																																																																																																																																																																																																				
Q1/Q2	2SC1740S, NPN	J5021740S0010	2	Q3	KTC1923Y/BKTC3194Y, NPN	J5023194Y0050	1	Q4-Q6	KRA107M/DTA114YS, PNP	J601107M00050	3	Q8L/R	DTC323TS, NPN	J602323TS0050	2	Q9	KRA107M/DTA114YS, PNP	J601107M00050	1	RESISTORS																																																																																																																																																																																																																																																																																													
R1	CERAMIC TUBULAR	0.022 μ F	25 V	D005223574530	1	R2	CERAMIC TUBULAR	0.047 μ F	50 V	Z D004473097060	1	R3	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R4	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R5	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R6	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R7	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R8	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R9	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R10	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R11	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R12	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R13	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R14	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R15	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R16	CERAMIC TUBULAR	0.01 μ F	16 V	M D005103773530	1	R17-R19	CERAMIC TUBULAR	0.01 μ F	16 V																																																																																																																																																																																																														

Ref. No.	Description	Part No.	Qty	Version	Ref. No.	Description	Part No.	Qty	Version
R117L/R	METAL FILM	470 ohm 1/5 W J C06004716P520	2		R206C/L/R	METAL FILM	390 ohm 1/5 W J C06003916P520	3	
R118L/R	METAL FILM	470 ohm 1/5 W J C06004716P520	2		R207C/L/R	METAL FILM	390 ohm 1/5 W J C06003916P520	3	
R119L/R	METAL FILM	470 ohm 1/5 W J C06004716P520	2		R208C/L/R	METAL FILM	1.5 kohm 1/5 W J C06001526P520	3	
R120L/R	METAL FILM	470 ohm 1/5 W J C06004716P520	2		R209C/L/R	METAL FILM	1.5 kohm 1/5 W J C06001526P520	3	
R122-R127	METAL FILM	1 kohm 1/5 W J C06001026P520	6		R210C/L/R	METAL FILM	560 ohm 1/5 W J C06005616P520	3	
R128	CARBON FILM	100 kohm 1/5 W J C00001046P520	1		R211C/L/R	METAL FILM	560 ohm 1/5 W J C06005616P520	3	
R129/R130	METAL FILM	220 ohm 1/5 W J C06002216P520	2		R212C/L/R	METAL FILM	560 ohm 1/5 W J C06005616P520	3	
R131	METAL FILM	470 ohm 1/5 W J C06004716P520	2		R213C/L/R	METAL FILM	560 ohm 1/5 W J C06005616P520	3	
R133	METAL FILM	3.3 ohm 1/5 W J C0603R306P520	1		R214C/L/R	METAL FILM	560 ohm 1/5 W J C06005616P520	3	
R134-R137	METAL FILM	3.3 kohm 1/5 W J C06003326P520	4		R215C/L/R	METAL FILM	4.7 kohm 1/5 W J C08004726P520	3	
R138-R140	METAL FILM	75 ohm 1/5 W J C06007506P520	3		R216C/L/R	METAL FILM	560 ohm 1/5 W J C06005616P520	3	
R141-R143	METAL FILM	75 ohm 1/5 W J C06007506P520	3		R217C/L/R	METAL FILM	82 ohm 1/5 W J C06008206P520	3	
R144-R146	METAL FILM	100 ohm 1/5 W J C06001016P520	3		R218C/L/R	METAL FILM	82 ohm 1/5 W J C06008206P520	3	
R147	METAL FILM	75 ohm 1/5 W J C06007506P520	1		R219C/L/R	METAL FILM	1.2 kohm 1/5 W J C06001226P520	3	
R148	METAL FILM	100 ohm 1/5 W J C06001016P520	1		R220C/L/R	METAL FILM	910 ohm 1/5 W J C06009116P520	3	
R154	METAL FILM	10 ohm 2 W J C060010086520	1		R221C/L/R	METAL FILM	1 kohm 1/5 W J C06001026P520	3	
R155	METAL FILM	4.7 ohm 2 W J C0604R706520	1		R222C/L/R	CARBON FILM	22 kohm 1/5 W J C00002236P520	3	
R156	METAL FILM	10 ohm 2 W J C060010066520	1		R223C/L/R	CARBON FILM	22 kohm 1/5 W J C00002236P520	3	
R157	METAL FILM	470 ohm 1/5 W J C06004716P520	1	A(Only)	R224C/L/R	METAL FILM	82 ohm 1/5 W J C06008206P520	3	
R158L/R	CARBON FILM	100 kohm 1/5 W J C00001046P520	2		R227C/L/R	CEMENT (Dual)	0.27 ohm 5 W J C141R27079300	3	
R159L/R	CARBON FILM	100 kohm 1/5 W J C00001046P520	2		R228C/L/R	METAL FILM	2.2 kohm 1/5 W J C06002226P520	3	
R160/R181	METAL FILM	220 ohm 1/5 W J C06002216P520	2		R229C/L/R	METAL FILM	2.2 kohm 1/5 W J C06002226P520	3	
R188	METAL FILM	4.7 kohm 1/5 W J C06004726P520	1		R230C/L/R	METAL FILM	1 kohm 1/5 W J C06001026P520	3	
R501	CARBON FILM	100 kohm 1/5 W J C00001046P520	1		R231C/L/R	CARBON FILM	8.8 kohm 1/5 W J C00008826P520	3	
R502	METAL FILM	1 kohm 1/5 W J C06001026P520	1		R232	CARBON FILM	68 kohm 1/5 W J C00006836P520	1	
R503	METAL FILM	1.2 kohm 1/5 W J C06001226P520	1		R233	CARBON FILM	100 kohm 1/5 W J C00001046P520	1	
R504	CARBON FILM	100 kohm 1/5 W J C00001046P520	1		R234	METAL FILM	3.3 kohm 1/5 W J C06003326P520	1	
R505	METAL FILM	1 kohm 1/5 W J C06001026P520	1		R235L/R	METAL FILM	10 ohm 1 W J C060010065520	2	
R506	METAL FILM	1.2 kohm 1/5 W J C06001226P520	1		R237L/R	METAL FILM	10 ohm 1 W J C060010065520	2	
R507/R508	METAL FILM	220 ohm 1/5 W J C06002216P520	2		R238C/L/R	CARBON FILM	22 kohm 1/5 W J C00002236P520	3	
R509/R510	CARBON FILM	100 kohm 1/5 W J C00001046P520	2		R239	METAL FILM	1.5 kohm 1/5 W J C06001526P520	1	
R511-R515	METAL FILM	1 kohm 1/5 W J C06001026P520	5		R240	METAL FILM	470 ohm 1/5 W J C06004716P520	1	
R516	CARBON FILM	4.7 kohm 1/5 W J C00004726P520	1		R241	CARBON FILM	10 kohm 1/5 W J C00001036P520	1	
R517/R518	METAL FILM	220 ohm 1/5 W J C06002216P520	2		R242	CARBON FILM	7.5 kohm 1/5 W J C00007526P520	1	D/RDS(Only)
R519	CARBON FILM	100 kohm 1/5 W J C00001046P520	1		R243	CARBON FILM	150 kohm 1/5 W J C00001546P520	1	
R522/R523	METAL FILM	220 ohm 1/5 W J C06002216P520	2		R244C/L/R	CARBON FILM	33 kohm 1/5 W J C00003336P520	3	
R524	METAL FILM	1 kohm 1/5 W J C06001026P520	1		R245C	METAL FILM	1.8 kohm 1/5 W J C06001826P520	1	
R525	CARBON FILM	100 kohm 1/5 W J C00001046P520	1		R245L/R	METAL FILM	1.2 kohm 1/5 W J C06001226P520	2	
PCB3 ASSEMBLY P.C.BOARD AMP302									
CAPACITORS									
C201C/L/R	ELECTROLYTIC SG	47 μ F 16 V M D040470083100	3		C201SL/SR	ELECTROLYTIC SG	47 μ F 16 V M D040470083100	2	
C202C/L/R	CERAMIC TUBULAR	88 pF 50 V J D001680067530	3		C202SL/SR	CERAMIC TUBULAR	100 pF 50 V J D001101077530	2	
C203C/L/R	ELECTROLYTIC SG	100 μ F 10 V M D040101082060	3		C203SS/UR	ELECTROLYTIC SG	100 μ F 10 V M D040101082060	2	
C204C/L/R	ELECTROLYTIC SA	470 μ F 6.3 V M D040471081100	3		C204SL/SR	ELECTROLYTIC SG	47 μ F 25 V M D040470084100	2	
C205C/L/R	ELECTROLYTIC SG	10 μ F 50 V M D040100087050	3		C205SS/UR	ELECTROLYTIC SG	10 μ F 50 V M D040100087050	2	
C206C/L/R	CERAMIC TUBULAR	47 pF 50 V M D001470067530	3		C206SL/SR	CERAMIC TUBULAR	47 pF 50 V J D001470067530	2	
C207C/L/R	ELECTROLYTIC SG	4.7 μ F 50 V M D0404R7078100	3		C207SL/SR	ELECTROLYTIC SG	4.7 μ F 50 V M D0404R7078100	2	
C208C/L/R	CERAMIC TUBULAR	15 pF 50 V M D001150067530	3		C208L/R	CERAMIC TUBULAR	15 pF 50 V J D001150067530	2	
C209C/L/R	ELECTROLYTIC SM	47 μ F 100 V M D04047008C130	3		C209SL/SR	ELECTROLYTIC SM	47 μ F 100 V M D04047008C130	2	
C210C/L/R	ELECTROLYTIC SM	47 μ F 100 V M D04047008C130	3		C210SL/SR	ELECTROLYTIC SM	47 μ F 100 V M D04047008C130	2	
C211C/L/R	ELECTROLYTIC SG	22 μ F 35 V M D040220085100	3		C211SL/SR	ELECTROLYTIC SG	10 μ F 50 V M D040100087050	2	
C212L/R	MYLAR	0.047 μ F 100 V J D020473706C080	2		C212SL/SR	ELECTROLYTIC SG	47 pF 50 V J D001470067530	2	
C213	ELECTROLYTIC SA	470 μ F 6.3 V M D040471081100	1		C207SL/SR	ELECTROLYTIC SG	4.7 μ F 50 V M D0404R7078100	2	
C214C/L/R	CERAMIC TUBULAR	470 pF 50 V M D005471077530	3		C208SL/SR	ELECTROLYTIC SM	47 μ F 100 V M D04047008C130	2	
C215	ELECTROLYTIC SG	1 μ F 50 V M D040010087050	1		C209SL/SR	ELECTROLYTIC SM	47 μ F 100 V M D04047008C130	2	
CONNECTORS									
CP201	PLUG, 9P	L1012200900000	1		CP203	CONNECTORS	L1012200300000	1	
CP202	PLUG, 4P	L1012200400000	1		CP207	PULG, 7P	L1042020007000	1	
CP204	PLUG, 3P	L102526703010	1		CP208	PULG, 8P	L1042020008000	1	
CP205	PLUG, 3P	L104202003000	1		CP209	PULG, 3P	L101220020010	1	
CP408	PLUG, 2P	L1012200200000	2		CP210	PULG, 3P	L1042020003000	1	
CP206	PULG, 8P	L101507600000	1		CP211	PULG, 3P	L1012200300000	1	
CP410	PLUG, 2P	L102526702010	1	D/RDS(Only)					
CN203	LEAD ASSY, 3P, 280mm	L022032634320	2						
CN411	LEAD ASSY, 3P, 120mm	L022031236320	1						
DIODES									
D201C/L/R	SWITCHING, 1N4148	K000414801520	3		CP210	DIODES	K000414801520	2	
D202C/L/R	SWITCHING, 1N4148	K000414801520	3		CP211	1N4148, SWITCHING	K000414801520	2	
D203	ZENER, UZ 9.1V BSC	K06009R124520	1		D201SL/SR	1N4148, SWITCHING	K000414801520	2	
D204	SWITCHING, 1N4148	K000414801520	1		D202SL/SR	1N4148, SWITCHING	K000414801520	2	
D205	SWITCHING, 1N4148	K000414801520	1	D/RDS(Only)	L201SL/SR	INDUCTOR, 0.5 μ H	D330900001320	2	
COILS									
L201LR	INDUCTOR, 0.5 μ H	D3309000001320	2						
TRANSISTORS									
Q203C/L/R	KTA1268/KTA870, PNP	J5001268B0050	3		Q203SL/SR	TRANSISTORS	J5001268B0050	2	
Q204C/L/R	KTA1268/KTA870, PNP	J5001268B0050	3		Q204SL/SR	KTA1268/KTA870, PNP	J5001268B0050	2	
Q205C/L/R	KTA1268/KTA870, PNP	J5001268B0050	3		Q205SL/SR	KTA1268/KTA870, PNP	J5001268B0050	2	
Q206C/L/R	BKTA1267Y, PNP	J5001267Y0050	3		Q206SL/SR	BKTA1267Y, PNP	J5001267Y0050	2	
Q207C/L/R	KTC3200/KTC2240BL, NPN	J50323200B0050	3		Q207SL/SR	KTC3200/KTC2240BL, NPN	J50323200B0050	2	
Q208C/L/R	KTC3200/KTC2240BL, NPN	J50323200B0050	3		Q208SL/SR	2SC3423	J502342300000	2	
Q209C/L/R	KTA1268/KTA870, PNP	J5001268B0050	3		Q211SL/SR	2SA1360	J500136000000	2	
Q210C/L/R	2SC4323	J503243200000	3		Q212SL/SR	2SC4137, NPN	J5024137V0130	2	
Q211C/L/R	2SA1360	J500136000000	3		Q213SL/SR	2SC4883A, NPN	J5024883Y0000	2	
Q212C/L/R	2SC4137, NPN	J5024137V0130	3		Q214SL/SR	2SA1859, PNP	J5021859Y0000	2	
Q213C/L/R	KTC2238Y	J5022238Y0000	3		Q215SL/SR	2SC3519A, NPN	J5023159Y0000	2	
Q214C/L/R	KTA968Y	J5009680Y0000	3		Q216SL/SR	2SA136A, PNP	J5001386Y0000	2	
Q215C/L/R	2SC2921	J5022921Y0000	3		Q217SL/SR	2SC1740S, NPN	J5021740S0010	2	
Q216C/L/R	2SA1215	J5001215Y0000	3						
Q217C/L/R	2SC1740S, NPN	J5021740S0010	3						
Q218	BKTA1267Y, PNP	J5001267Y0050	1						
Q219/Q220	2SC1740S, NPN	J5021740S0010	2		R201SL/SR	METAL FILM	1 kohm 1/5 W J C06001026P520	2	
RESISTORS									
R201C/L/R	METAL FILM	1 kohm 1/5 W J C06001026P520	3		R203SL/SR	CARBON FILM	33 kohm 1/5 W J C00003336P520	2	
R203C/L/R	CARBON FILM	33 kohm 1/5 W J C00003336P520	3		R204SL/SR	CARBON FILM	10 kohm 1/5 W J C00001036P520	2	
R204C/L/R	CARBON FILM	10 kohm 1/5 W J C00001036P520	3		R205SL/SR	METAL FILM	270 ohm 1/5 W J C06002716P520	2</td	

Ref. No.	Description	Part No.	Q'ty	Version	Ref. No.	Description	Part No.	Q'ty	Version
R210SL/SR	METAL FILM	560 ohm 1/5 W J C06005616P520	2		R385	CARBON FILM	180 kohm 1/5 W J C00001846P520	1	
R211SL/SR	METAL FILM	560 ohm 1/5 W J C06005616P520	2		R386	METAL FILM	3.9 kohm 1/5 W J C06003926P520	1	A(Only)
R212SL/SR	METAL FILM	560 ohm 1/5 W J C06005616P520	2		R387/R388	METAL FILM	470 ohm 1/5 W J C06004716P520	2	
R213SL/SR	METAL FILM	560 ohm 1/5 W J C06005616P520	2						
R214SL/SR	METAL FILM	560 ohm 1/5 W J C06005616P520	2						
R215SL/SR	METAL FILM	82 ohm 1/5 W J C06008206P520	2						
R218SL/SR	METAL FILM	82 ohm 1/5 W J C06008206P520	2		SW301-SW303	TECT SWITCH	G180040500010	3	
R219SL/SR	METAL FILM	1 kohm 1/5 W J C06001226P520	2		SW304-SW307	TECT SWITCH	G180040500010	4	RDS(Only)
R220SL/SR	METAL FILM	470 ohm 1/5 W J C06004716P520	2		SW308-SW328	TECT SWITCH	G180040500010	20	
R222SL/SR	CARBON FILM	22 kohm 1/5 W J C00002236P520	2		SW329	TECT SWITCH	G180040500010	1	RDS(Only)
R223SL/SR	CARBON FILM	22 kohm 1/5 W J C00002236P520	2		SW330-SW334	TECT SWITCH	G180040500010	5	
R224SL/SR	METAL FILM	82 ohm 1/5 W J C06008206P520	2		SW335	TECT SWITCH	G180040500010	1	A/K(Only)
R225SL/SR	METAL FILM	1 kohm 1/5 W J C060010265520	2		SW336-SW339	TECT SWITCH	G180040500010	4	
R226SL/SR	METAL FILM	1 kohm 1/5 W J C060010265520	2		X-TAL301	CST10M	E830100000050	1	
R227SL/SR	CEMENT (Dual)	0.27 ohm 5 W J C141R27079300	2						
R228SL/SR	METAL FILM	1 kohm 1/5 W J C06001026P520	2						
R229SL/SR	METAL FILM	1 kohm 1/5 W J C06001026P520	2						
R230SL/SR	METAL FILM	910 ohm 1/5 W J C06009116P520	2						
R231SL/SR	CARBON FILM	6.8 kohm 1/5 W J C00006826P520	2						
R235SL/SR	METAL FILM	10 ohm 1 W J C060010065520	2						
R238SL/SR	CARBON FILM	22 kohm 1/5 W J C00002236P520	2						
R244SL/SR	CARBON FILM	33 kohm 1/5 W J C00003336P520	2						
R245SL/SR	METAL FILM	2.2 kohm 1/5 W J C06002226P520	2						
R246SL/SR	METAL FILM	1 kohm 1/5 W J C06001026P520	2						
R247SL/SR	METAL FILM	47 ohm 1 W J C060047065520	2						
R249SL/SR	METAL FILM	47 ohm 1 W J C060047065520	2						
R251SL/SR	CARBON FILM	33 kohm 1/5 W J C00003336P520	2						
* ASSEMBLY P.C.BOARD FRONT (PCB 5, 6, 7, 8)									
PCB5 ASSEMBLY P.C.BOARD FRONT									
CAPACITORS									
C301-C310	CERAMIC TUBULAR	100 pF 50 V J D001101077530	10		CN601	CAPACITORS	C601L/R	4.7 μ F 50 V M D0404R7087100	2
C312	MYLAR	0.047 μ F 100 V M D02047306C060	2		C602L/R	CERAMIC TUBULAR	C602L/R	100 pF 50 V J D001101077530	2
C313	ELECTROLYTIC SG	0.1 μ F 80 V M D0404R10087050	1		C603L/R	ELECTROLYTIC SG	C603L/R	10 μ F 50 V M D040400087050	2
C316/C317	CERAMIC TUBULAR	100 pF 50 V J D001101077530	1		C604L/R	ELECTROLYTIC SG	C604L/R	4.7 μ F 50 V M D0404R7087100	2
C318/C319	CERAMIC TUBULAR	820 pF 50 V J D05821077530	2		C605L/R	MYLAR	C605L/R	0.082 μ F 63 V K D0208230870806	2
C320	ELECTROLYTIC SG	47 μ F 16 V M D040470065100	1		C606L/R	MYLAR	C606L/R	0.015 μ F 100 V J D2015306C060	2
C321	ELECTROLYTIC SG	47 μ F 25 V M D040470084100	1		C607L/R	MYLAR	C607L/R	0.022 μ F 100 V J D0223086C060	2
C322	ELECTROLYTIC SG	0.047 μ F 5.5 V M D090473704010	1		C608L/R	MYLAR	C608L/R	0.0033 μ F 100 V J D023340708060	2
C323	ELECTROLYTIC SG	10 μ F 50 V M D04040070650	1		C609L/R	MYLAR	C609L/R	0.33 μ F 63 V K D0203340708060	2
C324	ELECTROLYTIC SG	47 μ F 50 V M D040470087100	1		C610L/R	MYLAR	C610L/R	0.0082 μ F 100 V J D02082206C060	2
C325	ELECTROLYTIC SG	10 μ F 35 V M D040400085100	1	A(Only)	C611L/R	ELECTROLYTIC SG	C611L/R	1 μ F 50 V M D0404007087050	2
CONNECTORS									
CN300	LEAD ASSY, 5P, 80mm	L022050834320	1		C614	ELECTROLYTIC SG	C614	47 μ F 25 V M D040470084100	1
CN301	PLUG, 5257-2130	L131525752100	1		C615	ELECTROLYTIC SG	C615	3.3 μ F 50 V M D040470087050	1
CN302	LEAD ASSY, 8P, 350mm	L022083534320	1						
CN303	LEAD ASSY, 12P, 200mm	L022122034320	1						
CP304	PLUG ANGLE, 2P,	L101220020010	1						
CNT301	CABLE FPC, 2P, 350mm	L301186213590	1						
DIODES									
D301-D312	1N4148, SWITCHING	K000414801520	12		R601L/R	CARBON FILM	R601L/R	100 kohm 1/5 W J C00001046P520	2
D313	LED, SLR-34URCF25	K500032101120	1		R602L/R	CARBON FILM	R602L/R	1 Mohm 1/5 W J C00001056P520	2
D314/D315	1N4148, SWITCHING	K000414801520	2		R603L/R	CARBON FILM	R603L/R	47 kohm 1/5 W J C00004738P520	2
INTEGRATED CIRCUITS									
IC301	CXP82840-11Q	J088393227330	1		R604L/R	METAL FILM	R604L/R	2.7 kohm 1/5 W J C08002726P520	2
IC302	CRV1G342-185BD, REMOTE MODULE	E940342210000	1		R605L/R	CARBON FILM	R605L/R	10 Mohm 1/5 W J C00001066P520	2
TRANSISTORS									
Q301	BKTC3199/2SC3199Y, NPN	J5023199Y0050	1	A(Only)	R606L/R	METAL FILM	R606L/R	4.7 kohm 1/5 W J C08004726P520	2
Q306-Q308	BKTC3199/2SC3199Y, NPN	J5023199Y0050	3		R607L/R	CARBON FILM	R607L/R	27 kohm 1/5 W J C00002736P520	2
Q309	MPSA06, NPN	J5020600Y0050	1		R608L/R	METAL FILM	R608L/R	3.3 kohm 1/5 W J C06003328P520	2
Q310	DTC114Y, NPN	J602114Y0050	1		R609L/R	CARBON FILM	R609L/R	22 kohm 1/5 W J C00002236P520	2
DIODES									
D311-D312	1N4148, SWITCHING	K000414801520	12		R610L/R	METAL FILM	R610L/R	560 ohm 1/5 W J C06005616P520	2
D313	LED, SLR-34URCF25	K500032101120	1		R611L/R	METAL FILM	R611L/R	2.2 kohm 1/5 W J C06002226P520	2
D314/D315	1N4148, SWITCHING	K000414801520	2		R612L/R	METAL FILM	R612L/R	1 kohm 1/5 W J C06001026P520	2
INTEGRATED CIRCUITS									
IC301	CXP82840-11Q	J088393227330	1		R613L/R	CARBON FILM	R613L/R	100 kohm 1/5 W J C00001046P520	2
IC302	CRV1G342-185BD, REMOTE MODULE	E940342210000	1		R614	CARBON FILM	R614	100 kohm 1/5 W J C00001046P520	1
TRANSISTORS									
Q301	BKTC3199/2SC3199Y, NPN	J5023199Y0050	1	A(Only)	R615	CARBON FILM	R615	1 Mohm 1/5 W J C00001056P520	1
Q306-Q308	BKTC3199/2SC3199Y, NPN	J5023199Y0050	3		R616L/R	METAL FILM	R616L/R	220 ohm 1/5 W J C06002216P520	2
Q309	MPSA06, NPN	J5020600Y0050	1		R618L/R	CARBON FILM	R618L/R	1 Mohm 1/5 W J C00001056P520	2
RESISTORS									
R301-R310	METAL FILM	1 kohm 1/5 W J C06001026P520	10						
R312-R320	CARBON FILM	100 kohm 1/5 W J C00001046P520	9						
R321-R324	CARBON FILM	47 kohm 1/5 W J C00004736P520	4						
R325	CARBON FILM	22 kohm 1/5 W J C00002236P520	1						
R328-R328	CARBON FILM	10 kohm 1/5 W J C00001036P520	3						
R329	METAL FILM	4.7 kohm 1/5 W J C06004726P520	1						
R330/R331	CARBON FILM	22 kohm 1/5 W J C00002236P520	2						
R332/R333	CARBON FILM	10 kohm 1/5 W J C00001036P520	2						
R336/R337	CARBON FILM	10 kohm 1/5 W J C00001036P520	2						
R338	CARBON FILM	10 kohm 1/5 W J C00001036P520	1						
R339-R341	CARBON FILM	10 kohm 1/5 W J C00001036P520	3						
R342	CARBON FILM	100 kohm 1/5 W J C00001046P520	1						
R343/R344	CARBON FILM	10 kohm 1/5 W J C00001036P520	2						
R346-R349	CARBON FILM	100 kohm 1/5 W J C00001046P520	4						
R351/R352	METAL FILM	3.3 ohm 1/5 W J C0603R306P520	2						
R353-R355	CARBON FILM	10 kohm 1/5 W J C00001036P520	3						
R356	CARBON FILM	100 kohm 1/5 W J C00001046P520	1						
R357/R358	METAL FILM	100 ohm 1/5 W J C06001016P520	2						
R359/R360	CARBON FILM	100 kohm 1/5 W J C00001046P520	2						
R363	CARBON FILM	22 kohm 1/5 W J C00002236P520	1						
R364	CARBON FILM	220 kohm 1/5 W J C00002246P520	1						
R366-R368	METAL FILM	2.2 kohm 1/5 W J C06002228P520	3						
R369/R370	CARBON FILM	68 kohm 1/5 W J C00006836P520	2						
R372	CARBON FILM	10 kohm 1/5 W J C00001036P520	1	A/K(Only)					
R373/R374	CARBON FILM	100 kohm 1/5 W J C00001046P520	2	RDS(Only)					
R375	CARBON FILM	10 kohm 1/5 W J C00001036P520	1	A/K(Only)					
R376	METAL FILM	100 ohm 1/5 W J C06001016P520	1						
R377	CARBON FILM	100 kohm 1/5 W J C00001046P520	1						
R378	CARBON FILM	10 kohm 1/5 W J C00001036P520	1						
R379	METAL FILM	330 ohm 1/5 W J C06003316P520	1						
R380	METAL FILM	180 ohm 1/5 W J C06001816P520	1						
R381	CARBON FILM	10 kohm 1/5 W J C00001036P520	1						
R382	METAL FILM	1 kohm 1/5 W J C06001026P520	1	A(Only)					
R383/R384	CARBON FILM	10 kohm 1/5 W J C00001036P520	2	A(Only)					
CAPACITORS									
R385	CARBON FILM	180 kohm 1/5 W J C00001846P520	1						
R386	METAL FILM	3.9 kohm 1/5 W J C06003926P520	1						

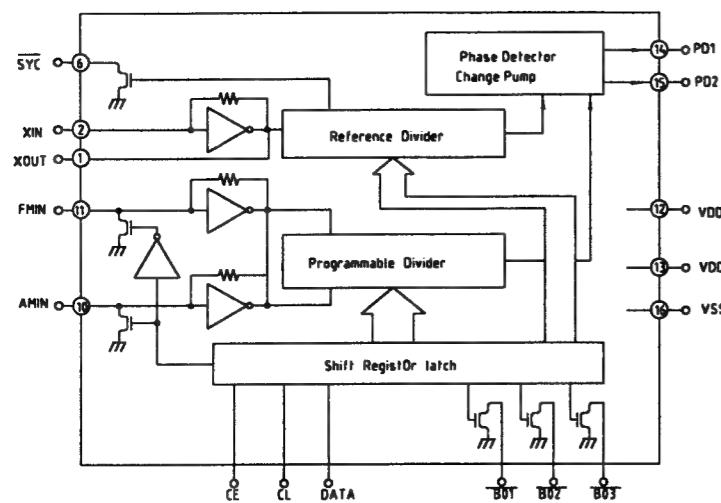
Ref. No.	Description	Part No.	Q'ty	Version	Ref. No.	Description	Part No.	Q'ty	Version			
C467	CERAMIC DISC	0.0047 μ F	100 V Z	D004472097060	1	C805/C806	ELECTROLYTIC SG	47 μ F	25 V M	D040470084100	2	
L201C	COIL INDUCTOR, 0.5 μ H			D330900001320	1	C807	ELECTROLYTIC SG	1 μ F	50 V M	D04010087050	1	
CN204	CONNECTORS LEAD ASSY, 3P, 100mm			L021031034310	1	C808	CERAMIC TUBULAR	0.001 μ F	50 V K	D005102077530	1	
CN205	LEAD ASSY, 8P, 240mm			L020082441660	1	C809	ELECTROLYTIC SG	22 μ F	16 V M	D040220083100	1	
CN210	LEAD ASSY, 3P, 300mm			L020033041660	1	C810	ELECTROLYTIC SG	1 μ F	50 V M	D04010087050	1	
CP452	PULG, 4P			L104202000400	1	C811	CERAMIC TUBULAR	0.001 μ F	50 V K	D005102077530	1	
R235C	RESISTORS METAL FILM	10 ohm	1 W	J C060010065520	1	C812	ELECTROLYTIC SG	10 μ F	35 V M	D040100085100	1	
R451~R453	METAL FILM	10 ohm	1 W	J C060010065520	3	C813-C816	ELECTROLYTIC SG	47 μ F	25 V M	D040470084100	4	
PCB10 ASSEMBLY P.C.BOARD SUPPLY												
C400	CAPACITORS MYLAR	0.1 μ F	250 V M	D02010408H210	1	C817	CERAMIC TUBULAR	0.1 μ F	50 V K	D005103077530	1	
C401	CERAMIC DISC	0.0047 μ F	400 V	D00847208K010	1	C818-C820	CERAMIC TUBULAR	100 pF	50 V J	D001101077530	3	
C402	ELECTROLYTIC SG	1000 μ F	16 V M	D040102083200	1	C821-C823	MYLAR	0.1 μ F	63 V K	D020104078060	3	
C403/C404	MYLAR	0.047 μ F	100 V J	D02047306C060	2	C824	CERAMIC TUBULAR	680 pF	50 V	D005681077530	1	
C405	ELECTROLYTIC SG	100 μ F	50 V M	D040101087100	1	C825	ELECTROLYTIC SG	10 μ F	50 V M	D040100087050	1	
C406	ELECTROLYTIC SG	1 μ F	50 V M	D040010087050	1	C826	MYLAR	0.1 μ F	63 V K	D020104078060	1	
C407	CERAMIC TUBULAR	0.1 μ F	50 V	D005104097530	1	C827	ELECTROLYTIC SG	4.7 μ F	50 V M	D0404R7087100	1	
C408	ELECTROLYTIC SG	1 μ F	50 V M	D040010087050	1	C828/C829	MYLAR	0.22 μ F	63 V K	D020224078060	2	
CONNECTORS												
CP400	AC PLUG			L1042020040000	1	C830-C833	MYLAR	0.33 μ F	63 V K	D020334078060	4	
CP751	PLUG, BL102R			L033588502400	1	C834-C837	MYLAR	0.022 μ F	100 V J	D02022308C060	4	
CP401	PLUG, 2P			L108202000220	1	C838	MYLAR	0.15 μ F	63 V K	D020154078060	1	
CP402	PLUG, 4P			L102526704010	1	C839	ELECTROLYTIC SG	4.7 μ F	50 V M	D0404R7087100	1	
CP302	PLUG, 8P			L101220080000	1	C840/C841	MYLAR	0.22 μ F	63 V K	D020224078060	2	
DIODES												
D401-D407	RECTIFIER, 1N4003			K040400300520	7	C842	ELECTROLYTIC SG	10 μ F	50 V M	D040100087050	1	
D408	ZENER, UZ 9.1V BSC			K06009R124520	1	C843-C845	MYLAR	0.01 μ F	100 V J	D02010308C060	3	
D409	ZENER, UZ 7.5V BSB			K06007R524520	1	C846	ELECTROLYTIC SG	100 μ F	10 V M	D040101082060	1	
D410	ZENER, UZ 9.1V BSC			K06009R124520	1	C847	MYLAR	0.1 μ F	63 V K	D020104078060	1	
D411	ZENER, UZ 12V BSC			K060120024520	1	C848UR	ELECTROLYTIC SG	10 μ F	50 V M	D040100087050	2	
D412	ZENER, UZ 4.3V BSA			K06004R314520	1	C849-C851	ELECTROLYTIC SG	4.7 μ F	50 V M	D0404R7087100	3	
FUSES												
△ F400	S.B 8A/125V			G650602121150	1 A	C852/C853	ELECTROLYTIC SG	47 μ F	25 V M	D040470084100	2	
△ F400	T4A/250V			G650402251160	1 D/RDS	C854	ELECTROLYTIC SG	4.7 μ F	50 V M	D0404R7087100	1	
△ F401	T2A/250V			G650202251160	1 D/RDS	C855/C856	ELECTROLYTIC SG	47 μ F	25 V M	D040470084100	2	
△ F402	NB350mA/125V			G650351121160	1 A	C857	ELECTROLYTIC SG	10 μ F	50 V M	D040100087050	1	
△ F402	T50mA			G650501251160	1 D/RDS	C858/C859	ELECTROLYTIC SG	4.7 μ F	50 V M	D0404R7087100	1	
RESISTORS												
R401	METAL FILM	10 ohm	1 W	J C080010065520	1	C860	ELECTROLYTIC SG	1 μ F	50 V K	D005102077530	1	
R402	METAL FILM	470 ohm	1/5 W	J C06004716P520	1	C861	CERAMIC TUBULAR	0.001 μ F	22 μ F	16 V M	D040220083100	1
R403	CARBON FILM	10 kohm	1/5 W	J C0001036P520	1	C862	ELECTROLYTIC SG	1 μ F	50 V M	D040010087050	1	
R404	METAL FILM	330 ohm	1/5 W	J C06003316P520	1	C863	CERAMIC TUBULAR	0.001 μ F	50 V K	D005102077530	1	
R405	CARBON FILM	15 kohm	1/5 W	J C0001536P520	1	C864	CERAMIC TUBULAR	0.001 μ F	50 V K	D005102077530	1	
R406	METAL FILM	3.3 Mohm	1/2 W	J C080033564520	1	C865	ELECTROLYTIC SG	0.47 μ F	50 V M	D0404R7087100	1	
R407	METAL FILM	2.2 kohm	1/5 W	J C08002226P520	1	C866	ELECTROLYTIC SG	10 μ F	50 V M	D040100087050	1	
R408	METAL FILM	56 ohm	1 W	J C060056065520	1	C867	CERAMIC TUBULAR	680 pF	50 V	D005681077530	1	
MISCELLANEOUS												
△ IC400	GD7806			J1287806000000	1	C868	MYLAR	0.058 μ F	100 V J	D02047206C060	1	
Q400	2SC1740S, NPN			J5021740S0010	1	C869	ELECTROLYTIC SG	0.047 μ F	100 V J	D02047206C060	1	
RLY400	HRCR313DC12V			G680121630000	1	C870	MYLAR	0.039 μ F	100 V J	D02039206C060	1	
PCB11 ASSEMBLY P.C.BOARD PRE IN/OUT												
C651-C658	CAPACITORS CERAMIC TUBULAR	100 pF	50 V J	D001101077530	8	C871	CERAMIC TUBULAR	0.068 μ F	63 V K	D020683078060	1	
CONNECTORS												
CN654	LEAD ASSY, 7P, 120mm			L022071234320	1	C872	ELECTROLYTIC SG	0.22 μ F	63 V K	D020224078060	1	
CP601	PLUG, 3P			L101220030000	1	C873	ELECTROLYTIC SG	10 μ F	50 V M	D040100087050	1	
CP602	PLUG, 6P			L101220060000	1	C874	ELECTROLYTIC SG	10 μ F	50 V M	D040100087050	1	
CP654	LEAD ASSY, 9P, 240mm			L022092434320	1	C875	MYLAR	0.022 μ F	100 V J	D02022306C060	1	
CN209	LEAD ASSY, 3P, 450mm			L022034537320	1	C876	MYLAR	0.047 μ F	100 V J	D02047206C060	1	
DIODES												
D852-D854	DIODES 1N4148, SWITCHING			K000414801520	3	C877	MYLAR	0.039 μ F	100 V J	D02039206C060	1	
TRANSISTORS												
Q651	KTD1303, NPN			J503130300050	1	C878	MYLAR	0.068 μ F	63 V K	D020683078060	1	
Q653-Q655	KTD1303, NPN			J503130300050	4	C879	MYLAR	0.22 μ F	63 V K	D020224078060	1	
Q658-Q660	DTA114YS, PNP			J600114Y0010	3	C880	MYLAR	0.1 μ F	63 V K	D020104078060	1	
RESISTORS												
R651/R652	METAL FILM	470 ohm	1/5 W	J C06004716P520	2	C881	ELECTROLYTIC SG	220 μ F	10 V M	D040221082100	1	
R653	METAL FILM	1 kohm	1/5 W	J C06001026P520	1	C882	ELECTROLYTIC SG	220 μ F	16 V M	D040221083100	1	
R654/R655	METAL FILM	2.2 kohm	1/5 W	J C06002226P520	2	C883	ELECTROLYTIC SG	220 μ F	10 V M	D040221082100	1	
R656/R657	METAL FILM	1 kohm	1/5 W	J C06001026P520	1	C884/C885	MYLAR	0.1 μ F	63 V K	D020104078060	2	
R658/R659	METAL FILM	2.2 kohm	1/5 W	J C06002226P520	2	C886-C888	CERAMIC TUBULAR	100 pF	50 V J	D001101077530	3	
R660/R661	METAL FILM	1 kohm	1/5 W	J C06001026P520	2	C889/C890	ELECTROLYTIC SG	220 μ F	16 V M	D040221083100	2	
R662	METAL FILM	2.2 kohm	1/5 W	J C06002226P520	1	C891	CERAMIC TUBULAR	150 pF	50 V	D005151077530	1	
R663	METAL FILM	1 kohm	1/5 W	J C06001026P520	1	C892	MYLAR	0.022 μ F	100 V J	D02022306C060	1	
R664	METAL FILM	2.2 kohm	1/5 W	J C06002226P520	1	C893	CERAMIC DISC	680 pF	50 V J	D022681067050	1	
R665/R668	METAL FILM	1 kohm	1/5 W	J C06001026P520	1	C894	ELECTROLYTIC SG	4.7 μ F	50 V M	D0404R7087100	1	
R666-R667	METAL FILM	470 ohm	1/5 W	J C06004716P520	1	C895	ELECTROLYTIC SG	47 μ F	10 V M	D040471082100	1	
R670-R672	CARBON FILM	47 kohm	1/5 W	J C00004736P520	3	C896	ELECTROLYTIC SG	47 μ F	10 V M	D040470084100	2	
CONNECTORS												
CN102	PLUG, BP					C912	CERAMIC TUBULAR	100 pF	50 V J	D001101077530	4	
CP303	PLUG, 12P					C913	ELECTROLYTIC SG	100 μ F	16 V M	D040101082060	2	
CP602	PLUG, 6P					C914/C915	ELECTROLYTIC SG	100 μ F	10 V M	D040101082060	2	
CP654	PLUG, 7P					C916	MYLAR	0.047 μ F	100 V J	D02047306C060	1	
DIODES												
D801/D802	DIODES 1N4148, SWITCHING					C917	ELECTROLYTIC SG	10 μ F	50 V M	D040100087050	1	
D803	ZENER, UZ 12V BSC					C918/C919	ELECTROLYTIC SG	220 μ F	10 V M	D040221082100	2	
D804/D805	1N4148, SWITCHING					C920	CERAMIC TUBULAR	680 pF	50 V	D05681077530	1	
D906/D907	ZENER, UZ 6.8V BSC					C921/C922	CERAMIC TUBULAR	0.1 μ F	50 V	D005104097530	2	
INTEGRATED CIRCUIT												
IC801-IC805	KIA4559P/KIA7555P					IC809	256K D-RAM			J12145590010	5	
IC806</												

Ref. No.	Description	Part No.	Q'ty	Version	Ref. No.	Description	Part No.	Q'ty	Version
IC810	MC14094BCP	J040140940000	1		PCB1	ASSEMBLY P.C.BOARD TUNER	7028040776500	A	
IC811	LC7822	J080782200000	1		PCB1	ASSEMBLY P.C.BOARD TUNER	7028040789000	D	
IC812	TC9299	J084929800000	1		PCB1	ASSEMBLY P.C.BOARD TUNER	7028040770600	K	
IC813	TA7291S	J127729100000	1		PCB1	ASSEMBLY P.C.BOARD TUNER	7028040790800	RDS	
TRANSISTORS									
Q801	BKTA1267Y, PNP	J5001267Y0050	1		PCB2	ASSEMBLY P.C.BOARD MAIN	7028040775000	A	
Q802-Q804	DTC114Y, NPN	J6020114Y0050	3		PCB2	ASSEMBLY P.C.BOARD MAIN	7028040787500	D	
Q805	DTA114Y, PNP	J6000114Y0010	1		PCB2	ASSEMBLY P.C.BOARD MAIN	7028040769100	K	
Q806	BKTC3199/SC3199Y, NPN	J5023199Y0050	1		PCB2	ASSEMBLY P.C.BOARD MAIN	7028040789300	RDS	
RESISTORS									
R801L/R	CARBON FILM	100 kohm 1/5 W J C00001046P520	2		PCB3	ASSEMBLY P.C.BOARD AMP302	'7028040776400	A	
R802	CARBON FILM	22 kohm 1/5 W J C00002236P520	1		PCB3	ASSEMBLY P.C.BOARD AMP302	7028040788900	D	
R803L/R	CARBON FILM	100 kohm 1/5 W J C00001046P520	2		PCB3	ASSEMBLY P.C.BOARD AMP302	7028040770500	K	
R804L/R	METAL FILM	470 ohm 1/5 W J C08004716P520	2		PCB3	ASSEMBLY P.C.BOARD AMP302	7028040790700	RDS	
R805L/R	METAL FILM	1 kohm 1/5 W J C06001026P520	2		► THE ASS'Y PCB AMP302(PCB3) INCLUDE BELOW.				
R806L/R	CARBON FILM	100 kohm 1/5 W J C00001046P520	2		① THE ASS'Y PCB CNT-2.				
R807/R808	METAL FILM	220 ohm 1/5 W J C06002216P520	2		PCB4	ASSEMBLY P.C.BOARD AMP202	7028040776700	A	
R809	METAL FILM	1 kohm 1/5 W J C06001026P520	1		PCB4	ASSEMBLY P.C.BOARD AMP202	7028040789200	D	
R810	CARBON FILM	1 M ohm 1/5 W J C00001056P520	1		PCB4	ASSEMBLY P.C.BOARD AMP202	7028040770800	K	
R811	METAL FILM	1.5 kohm 1/5 W J C06001026P520	1		PCB4	ASSEMBLY P.C.BOARD AMP202	7028040791000	RDS	
R812	CARBON FILM	5.1 kohm 1/5 W J C00005126P520	1		PCB5	ASSEMBLY P.C.BOARD FRONT	7028040775200	A	
R813	CARBON FILM	10 kohm 1/5 W J C00001036P520	1		PCB5	ASSEMBLY P.C.BOARD FRONT	7028040787700	D	
R814	METAL FILM	1 kohm 1/5 W J C06001026P520	1		PCB5	ASSEMBLY P.C.BOARD FRONT	7028040789300	K	
R815	CARBON FILM	1 M ohm 1/5 W J C00001056P520	1		PCB5	ASSEMBLY P.C.BOARD FRONT	7028040789500	RDS	
R816	METAL FILM	4.7 kohm 1/5 W J C06004726P520	1		► THE ASS'Y PCB FRONT(PCB5) INCLUDE BELOW.				
R817	METAL FILM	1.5 kohm 1/5 W J C06001526P520	1		① THE ASS'Y PCB TONE (PCB6).				
R818	CARBON FILM	10 kohm 1/5 W J C00001036P520	1		② THE ASS'Y PCB SPKER SWITCH (PCB7).				
R819	METAL FILM	1 kohm 1/5 W J C06001026P520	1		③ THE ASS'Y PCB VCR2 FRONT (PCB8).				
R820-R823	METAL FILM	220 ohm 1/5 W J C06002216P520	4		④ THE ASS'Y PCB SWITCH1.				
R824-R826	METAL FILM	1 kohm 1/5 W J C06001026P520	3		⑤ THE ASS'Y PCB SWITCH2.				
R827/R828	CARBON FILM	7.5 kohm 1/5 W J C00007526P520	2		PCB9	ASSEMBLY P.C.BOARD SUPPLY	7028040775900	A	
R829	CARBON FILM	47 kohm 1/5 W J C00004736P520	1		PCB9	ASSEMBLY P.C.BOARD SUPPLY	7028040788400	D	
R830	CARBON FILM	15 kohm 1/5 W J C00001536P520	1		PCB9	ASSEMBLY P.C.BOARD SUPPLY	'7028040770000	K	
R831	CARBON FILM	47 kohm 1/5 W J C00004736P520	1		PCB9	ASSEMBLY P.C.BOARD SUPPLY	7028040790200	RDS	
R832	CARBON FILM	15 kohm 1/5 W J C00001536P520	1		► THE ASS'Y PCB SUPPLY (PCB10) INCLUDE BELOW.				
R833	CARBON FILM	10 M ohm 1/5 W J C00001066P520	1		① THE ASS'Y PCB SPEAKER (PCB9).				
R834-R836	CARBON FILM	22 kohm 1/5 W J C00002236P520	3		② THE ASS'Y PCB PRE IN/OUT (PCB11).				
R837L/R	CARBON FILM	6.8 kohm 1/5 W J C00006826P520	2		③ THE ASS'Y PCB SURROUND (PCB12).				
R838L/R	CARBON FILM	100 kohm 1/5 W J C00001046P520	2		► THE ASS'Y PCB SURPLY (PCB10) INCLUDE BELOW.				
R839-R840	CARBON FILM	10 kohm 1/5 W J C00001036P520	2		① THE ASS'Y PCB TONE (PCB6).				
R841-R843	CARBON FILM	22 kohm 1/5 W J C00002236P520	3		② THE ASS'Y PCB SPKER SWITCH (PCB7).				
R844	METAL FILM	1.5 kohm 1/5 W J C06001526P520	1		③ THE ASS'Y PCB VCR2 FRONT (PCB8).				
R845	METAL FILM	880 ohm 1/5 W J C06008816P520	1		④ THE ASS'Y PCB SWITCH1.				
R846	METAL FILM	1.8 kohm 1/5 W J C06001826P520	1		⑤ THE ASS'Y PCB SWITCH2.				
R847-R848	METAL FILM	220 ohm 1/5 W J C06002216P520	2		PCB9	ASSEMBLY P.C.BOARD SUPPLY	7028040775900	A	
R849-R850	CARBON FILM	22 kohm 1/5 W J C00002236P520	2		PCB9	ASSEMBLY P.C.BOARD SUPPLY	7028040788400	D	
R851-R852	METAL FILM	220 ohm 1/5 W J C06002216P520	2		PCB9	ASSEMBLY P.C.BOARD SUPPLY	'7028040770000	K	
R854-R855	CARBON FILM	100 kohm 1/5 W J C00001046P520	2		PCB9	ASSEMBLY P.C.BOARD SUPPLY	7028040790200	RDS	
R856	CARBON FILM	47 kohm 1/5 W J C00004736P520	1		► THE ASS'Y PCB SUPPLY (PCB10) INCLUDE BELOW.				
R857-R858	CARBON FILM	100 kohm 1/5 W J C00001046P520	2		① THE ASS'Y PCB SPEAKER (PCB9).				
R859	METAL FILM	1 kohm 1/5 W J C06001026P520	1		② THE ASS'Y PCB PRE IN/OUT (PCB11).				
R860	CARBON FILM	1 M ohm 1/5 W J C00001056P520	1		③ THE ASS'Y PCB SURROUND (PCB12).				
R861	METAL FILM	1.5 kohm 1/5 W J C06001526P520	1		► THE ASS'Y PCB SUPPLY (PCB10) INCLUDE BELOW.				
R862	METAL FILM	3.3 kohm 1/5 W J C06003326P520	1		① THE ASS'Y PCB TONE (PCB6).				
R863	CARBON FILM	10 kohm 1/5 W J C00001036P520	1		② THE ASS'Y PCB SPKER SWITCH (PCB7).				
R864	METAL FILM	1 kohm 1/5 W J C06001026P520	1		③ THE ASS'Y PCB VCR2 FRONT (PCB8).				
R865	CARBON FILM	1 M ohm 1/5 W J C00001056P520	1		④ THE ASS'Y PCB SWITCH1.				
R866	METAL FILM	1.5 kohm 1/5 W J C06001526P520	1		⑤ THE ASS'Y PCB SWITCH2.				
R867	METAL FILM	4.7 kohm 1/5 W J C06004726P520	1		► THE ASS'Y PCB SUPPLY (PCB10) INCLUDE BELOW.				
R868	CARBON FILM	10 kohm 1/5 W J C00001036P520	1		① THE ASS'Y PCB TONE (PCB6).				
R869	METAL FILM	1 kohm 1/5 W J C06001026P520	1		② THE ASS'Y PCB SPKER SWITCH (PCB7).				
R870	METAL FILM	3.9 kohm 1/5 W J C06003926P520	1		③ THE ASS'Y PCB VCR2 FRONT (PCB8).				
R871	CARBON FILM	39 kohm 1/5 W J C00003936P520	1		④ THE ASS'Y PCB SWITCH1.				
R872/R873	CARBON FILM	8.2 kohm 1/5 W J C060008226P520	2		⑤ THE ASS'Y PCB SWITCH2.				
R874	CARBON FILM	15 kohm 1/5 W J C00001536P520	1		► THE ASS'Y PCB SUPPLY (PCB10) INCLUDE BELOW.				
R875	METAL FILM	3.3 kohm 1/5 W J C060003326P520	1		① THE ASS'Y PCB TONE (PCB6).				
R876	CARBON FILM	47 kohm 1/5 W J C00004736P520	1		② THE ASS'Y PCB SPKER SWITCH (PCB7).				
R877	CARBON FILM	1 M ohm 1/5 W J C00001056P520	1		③ THE ASS'Y PCB VCR2 FRONT (PCB8).				
R878	METAL FILM	56 ohm 1/5 W J C060005606P520	1		④ THE ASS'Y PCB SWITCH1.				
R879	CARBON FILM	10 kohm 1/5 W J C00001036P520	1		⑤ THE ASS'Y PCB SWITCH2.				
R880	METAL FILM	56 ohm 1 W J C0600056065520	1		► THE ASS'Y PCB SUPPLY (PCB10) INCLUDE BELOW.				
R881	CARBON FILM	5.6 kohm 1/5 W J C000005626P520	1		① THE ASS'Y PCB TONE (PCB6).				
R882	CARBON FILM	47 kohm 1/5 W J C00004736P520	1		② THE ASS'Y PCB SPKER SWITCH (PCB7).				
R883-R885	METAL FILM	1 kohm 1/5 W J C060001026P520	3		③ THE ASS'Y PCB VCR2 FRONT (PCB8).				
R886-R887	CARBON FILM	220 kohm 1/5 W J C00002246P520	2		④ THE ASS'Y PCB SWITCH1.				
R888	METAL FILM	1 kohm 1/5 W J C060001026P520	1		⑤ THE ASS'Y PCB SWITCH2.				
R889	CARBON FILM	47 kohm 1/5 W J C00004736P520	1		► THE ASS'Y PCB SUPPLY (PCB10) INCLUDE BELOW.				
R890	METAL FILM	220 ohm 1/5 W J C06002216P520	1		① THE ASS'Y PCB TONE (PCB6).				
R891-R893	METAL FILM	1 kohm 1/5 W J C060001026P520	3		② THE ASS'Y PCB SPKER SWITCH (PCB7).				
R894	CARBON FILM	100 kohm 1/5 W J C00001046P520	1		③ THE ASS'Y PCB VCR2 FRONT (PCB8).				
R895-R897	METAL FILM	220 kohm 1/5 W J C06002216P520	3		④ THE ASS'Y PCB SWITCH1.				
R898-R900	METAL FILM	1 kohm 1/5 W J C060001026P520	3		⑤ THE ASS'Y PCB SWITCH2.				
R901	METAL FILM	820 ohm 1/5 W J C060008216P520	1		► THE ASS'Y PCB SUPPLY (PCB10) INCLUDE BELOW.				
R902	METAL FILM	220 ohm 1/5 W J C060002216P520	1		① THE ASS'Y PCB TONE (PCB6).				
R903	CARBON FILM	7.5 kohm 1/5 W J C000007526P520	1		② THE ASS'Y PCB SPKER SWITCH (PCB7).				
R904	CARBON FILM	10 kohm 1/5 W J C00001036P520	1		③ THE ASS'Y PCB VCR2 FRONT (PCB8).				
R905	CARBON FILM	2.2 kohm 1/5 W J C00002226P520	1		④ THE ASS'Y PCB SWITCH1.				
R906/R907	METAL FILM	150 ohm 1 W J C0600015165520	2		⑤ THE ASS'Y PCB SWITCH2.				
R908	CARBON FILM	8.2 kohm 1/5 W J C000008226P520	1		► THE ASS'Y PCB SUPPLY (PCB10) INCLUDE BELOW.				
R909	CARBON FILM	100 kohm 1/5 W J C00001046P520	1		① THE ASS'Y PCB TONE (PCB6).				
R910	METAL FILM	2.2 kohm 1/5 W J C060002226P520	1		② THE ASS'Y PCB SPKER SWITCH (PCB7).				
SEMI FIXED VARIABLE RESISTORS									
VR801	50KAX4	C495145303200	1						

IC FUNCTIONAL BLOCK DIAGRAM

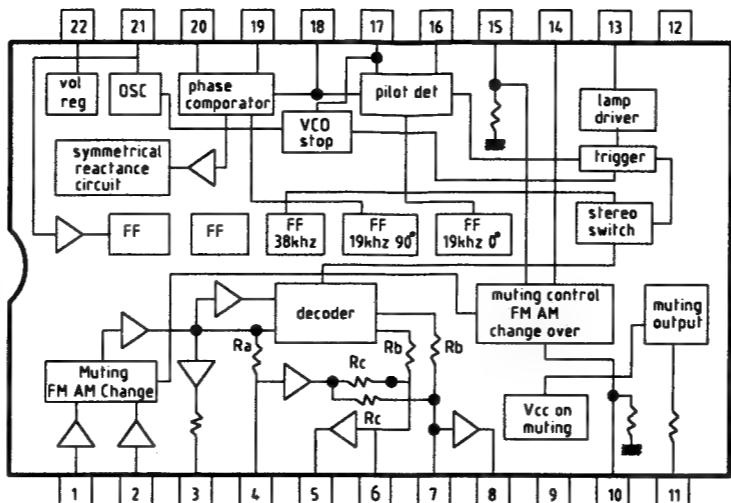
Model No. : R-725/RDS · AV-725

IC 1 : LM7001M

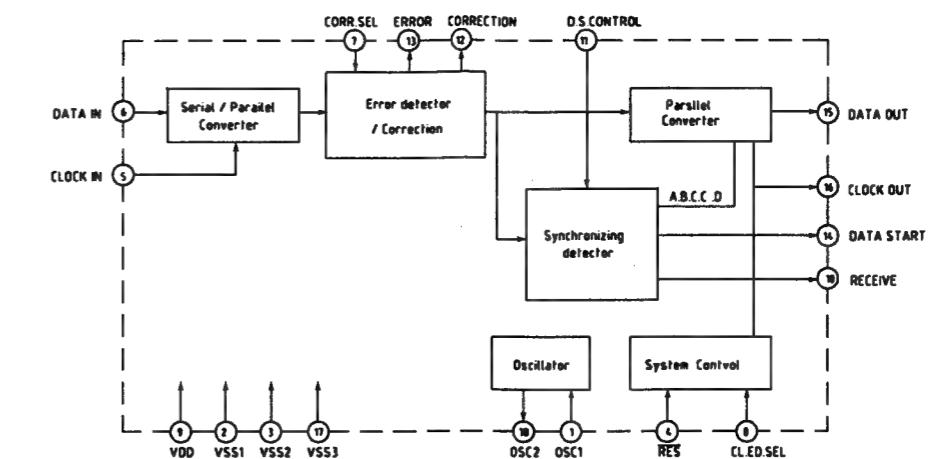


Pin Name	LM 7001M
1	XOUT
2	XIN
3	CE
4	CL
5	DATA
6	SYC
7	B01
8	B02
9	B03
10	B04
11	AMIN
12	VDD1
13	VDD2
14	PD1
15	VSS
16	VDD1
17	P01
18	P02
19	P03
20	VSS

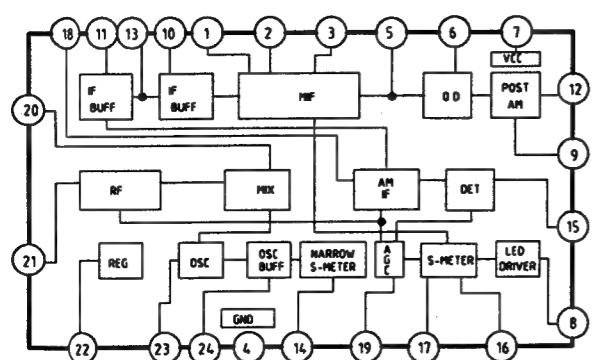
IC 3 : LA3401



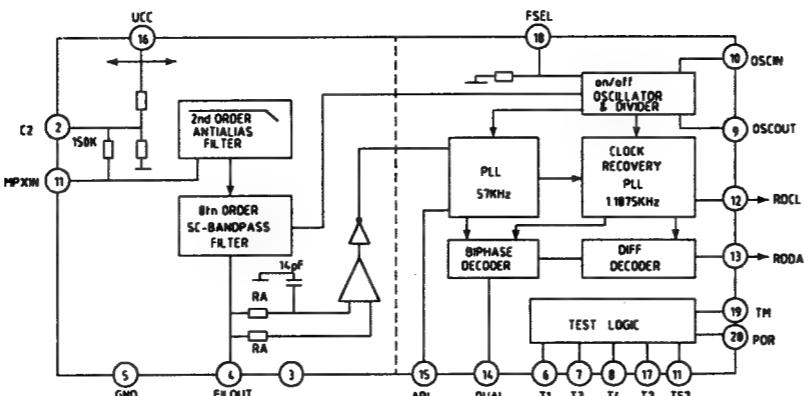
IC 5 : LC7073M



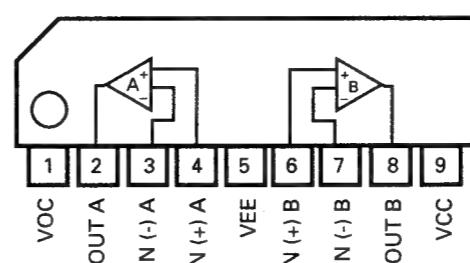
IC 2 : LA1266G



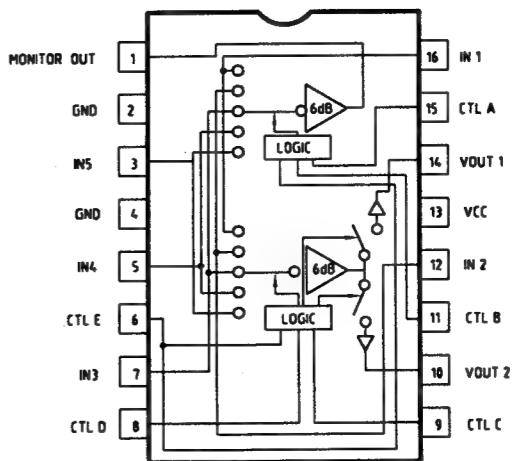
IC 4 : TDA7330BD



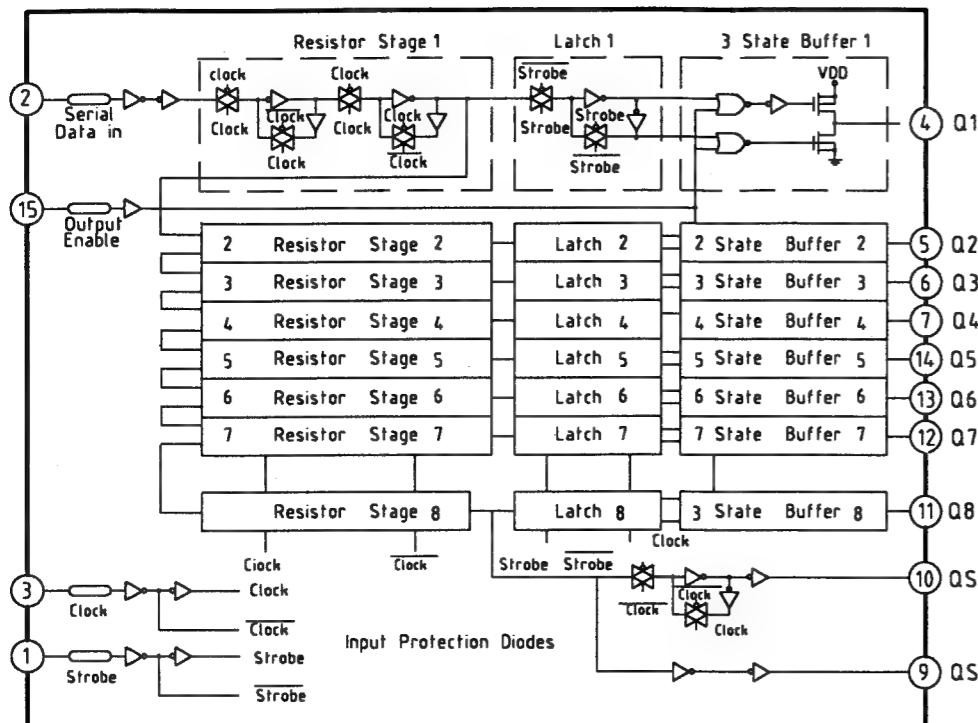
IC 101, 107, 501, 503 : KIA4559



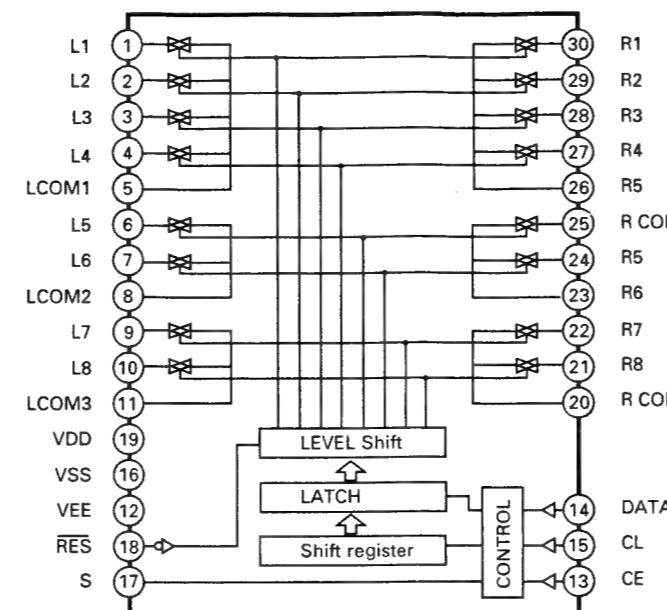
IC 104 : BA7625



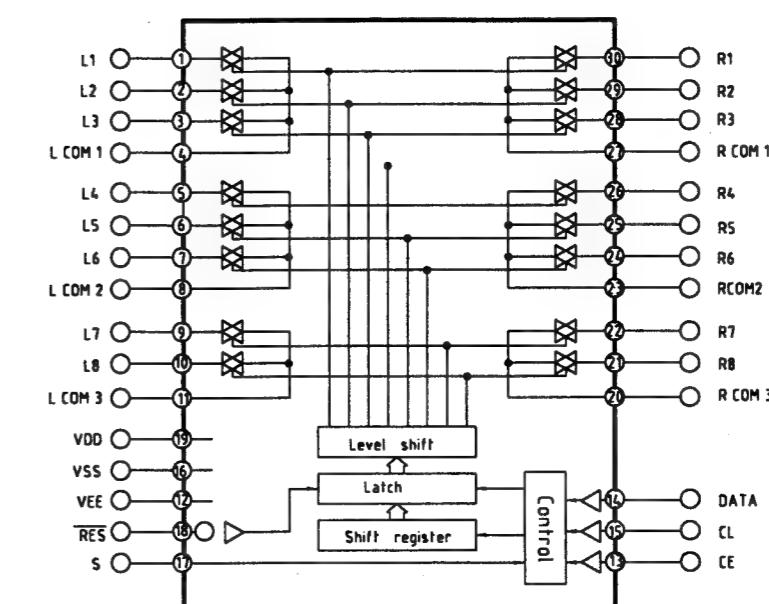
IC 106, 806, 810 : MC14094BCP



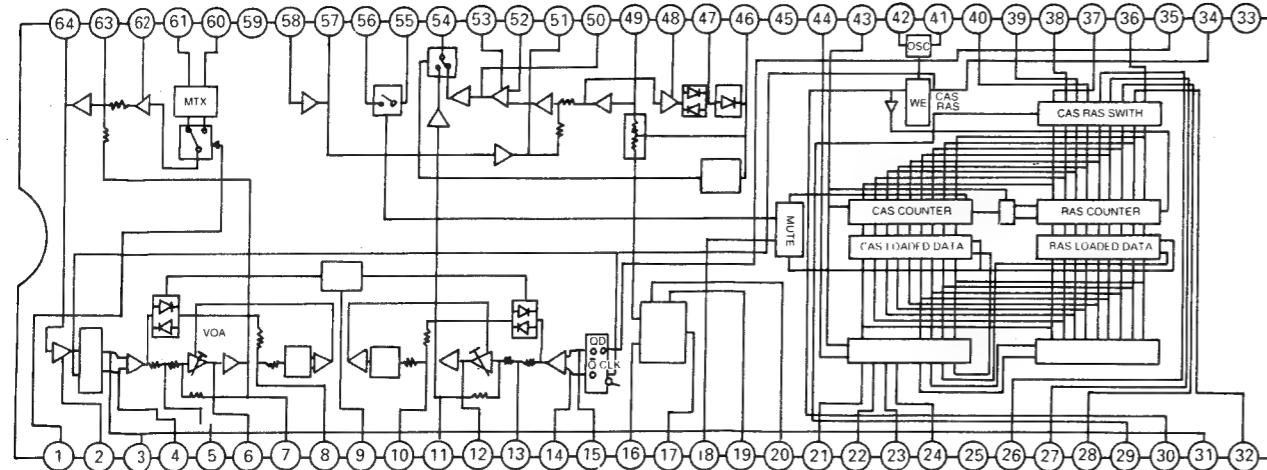
IC 102, 103 : LC7821



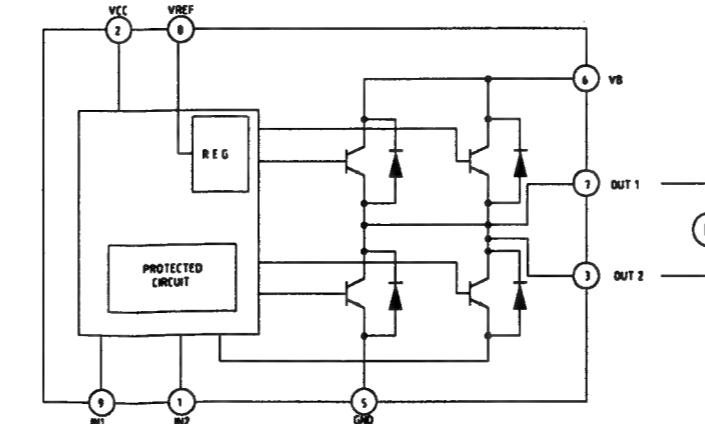
IC 811 : LC7822



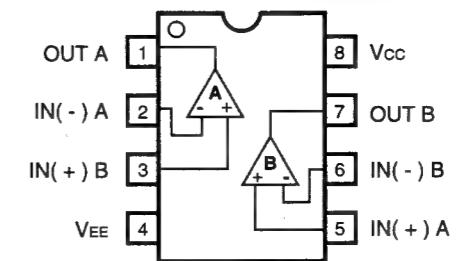
IC 808 : LV-1000



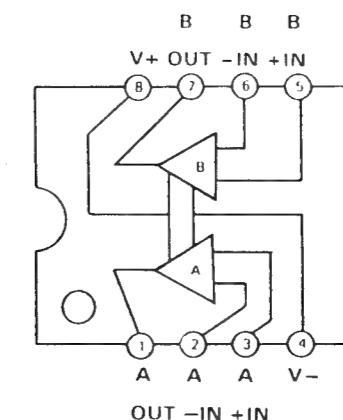
IC 813 : TA7291S



IC 601 : NJM2068DD

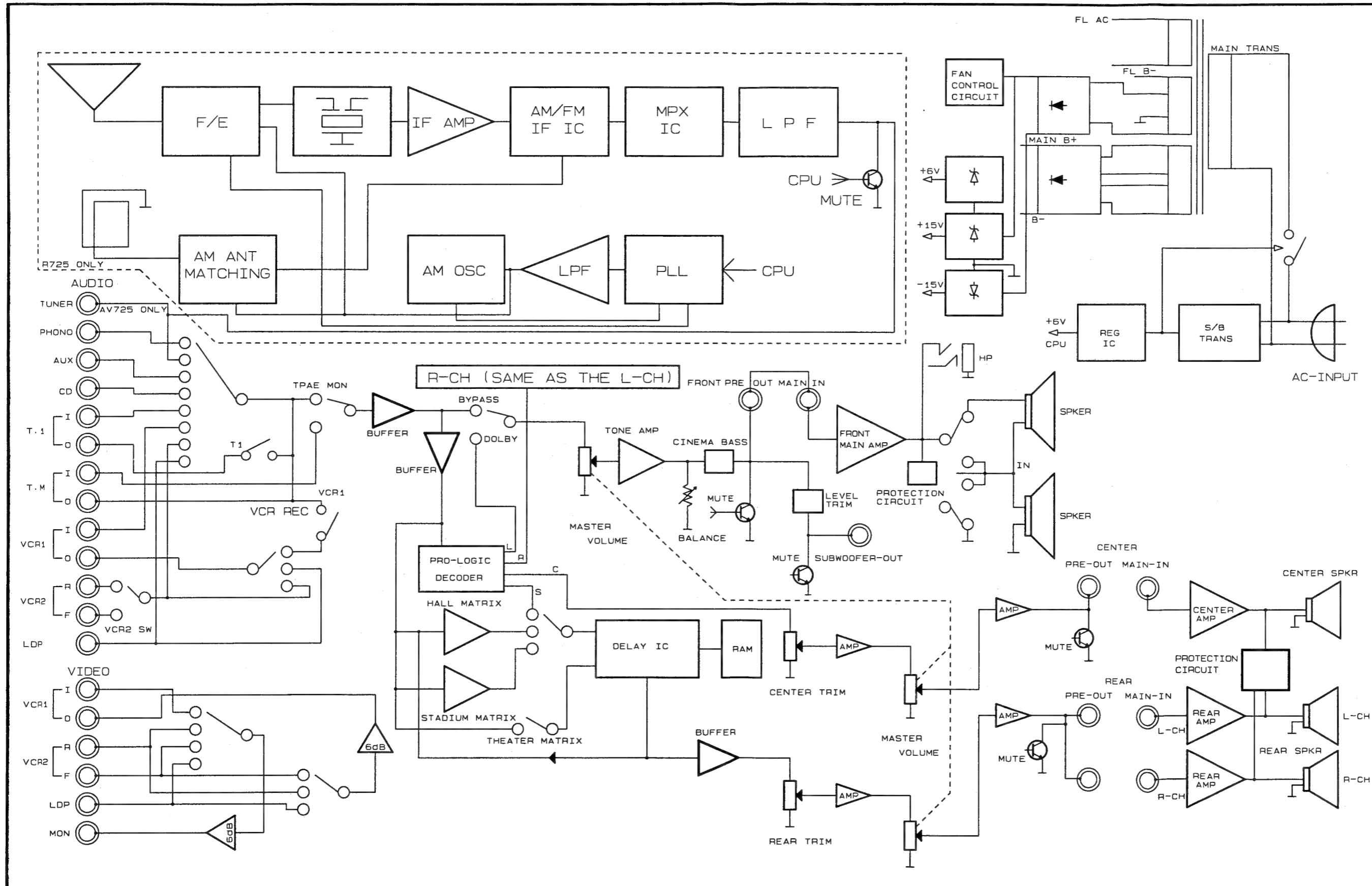


IC 801-805 : KIA 4559P



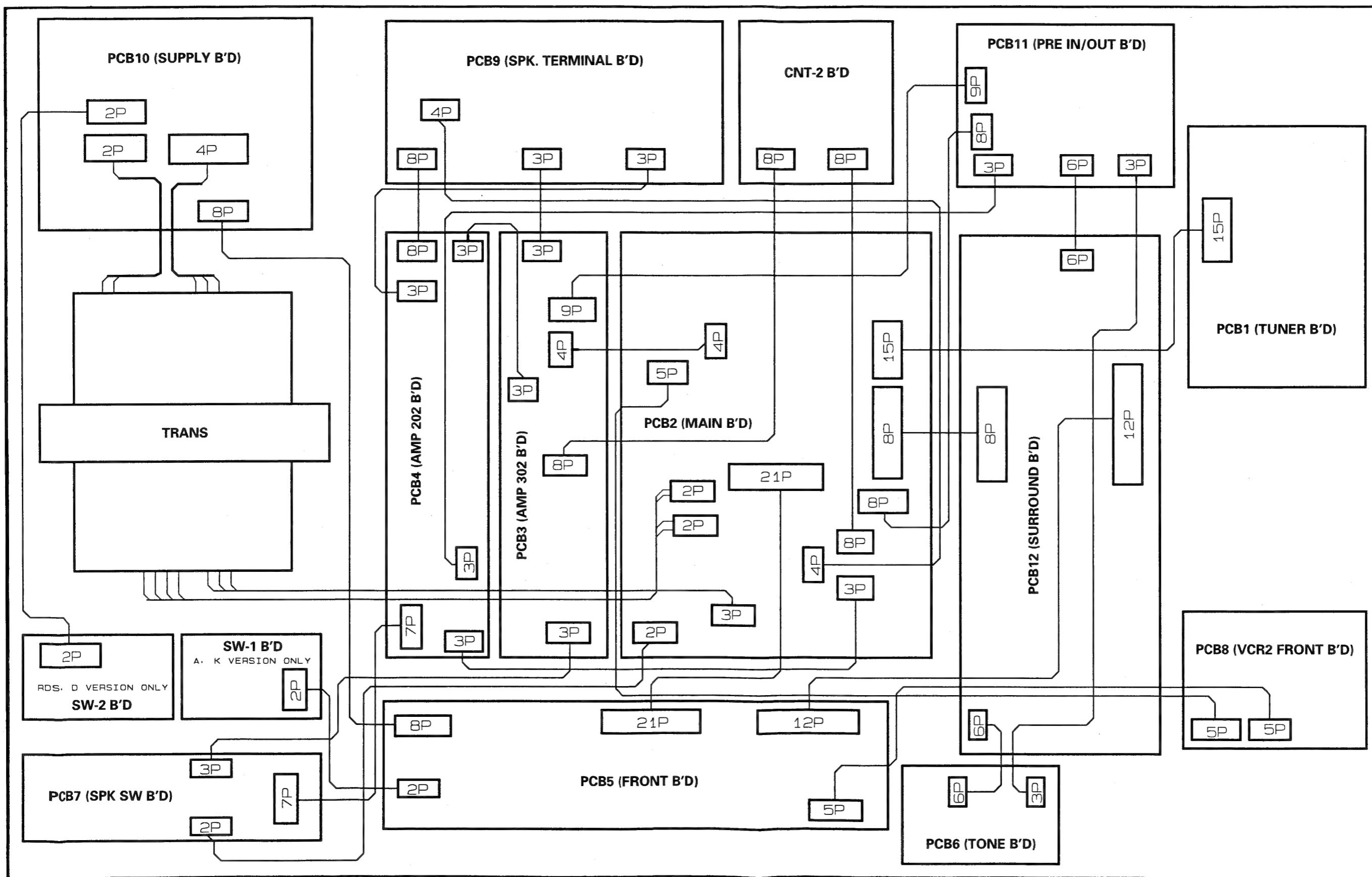
BLOCK DIAGRAM

Model No. : R-725/RDS · AV-725



WIRING DIAGRAM

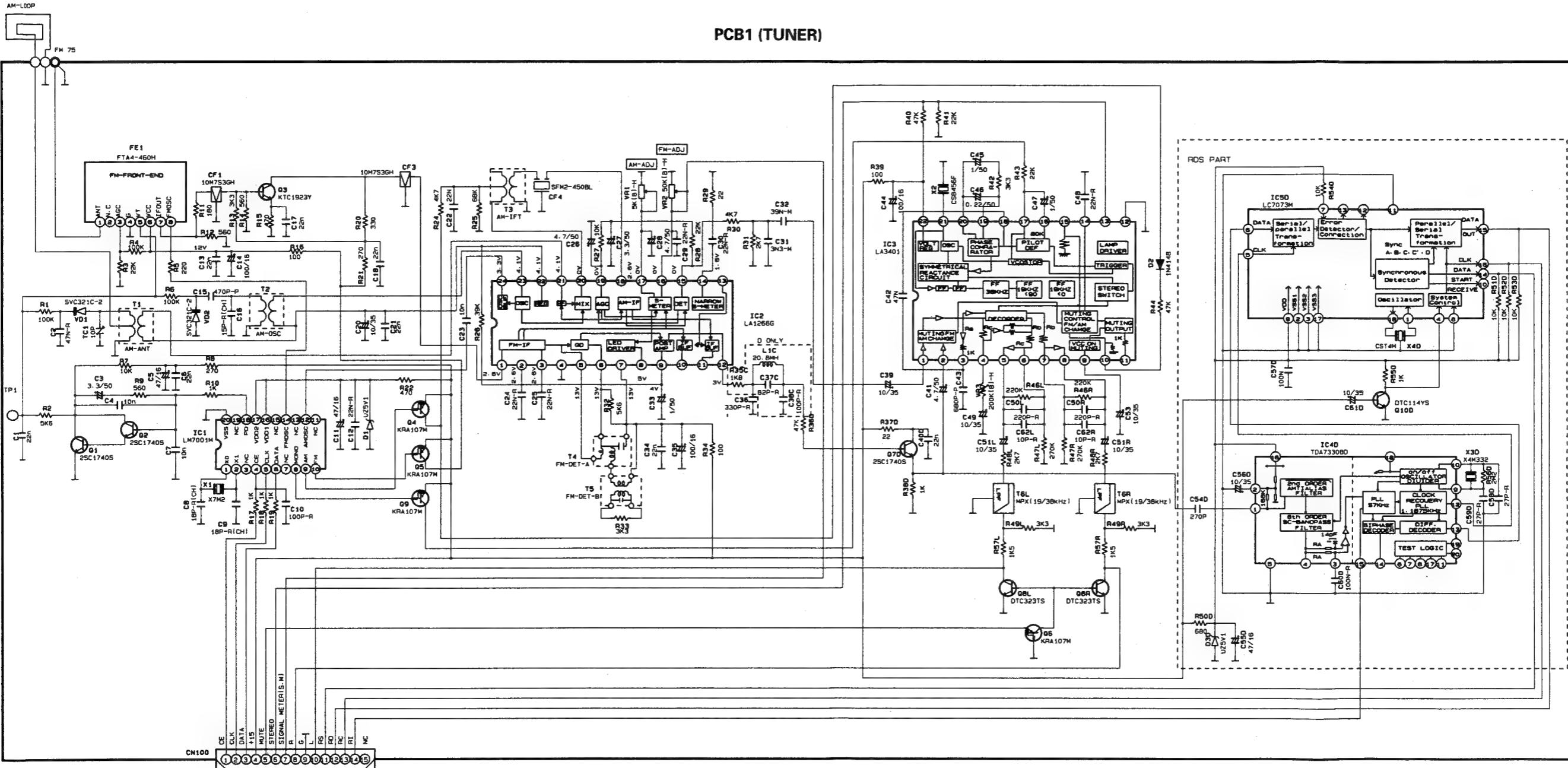
Model No. : R-725/RDS · AV-725



SCHEMATIC DIAGRAM (I)

Model No. : R-725/RDS · AV-725

PCB1 (TUNER)



R. NO	VER.	RDS	D	A
R26		47K	47K	18K
R35C		1KB	1KB	J27
R46L		220K	220K	120K
R45R		220K	220K	120K
R47L		270K	270K	180K
R47R		270K	270K	180K
C37C	B2P-R	B2P-R		X
C38C	100P-R	100P-R		X
C50L	220P-R	220P-R		560P
C50R	220P-R	220P-R		560P
C52L	10P-R	10P-R		66P
C52R	10P-R	10P-R		66P
R36D	47K	J25		J25
R38D		1K	X	X
C40D	22N		X	X
R37D	22		X	X
CF2_10..7	J26	J26		J26
Q7D	C1740		X	X
L1C	20.8MHz	20.8MHz		X
C35				330P-R

NOTES

1. Resistor values are indicated in ohms unless otherwise specified
 $1K\cdot1.000 \quad M=1.000.000 \Omega$
2. Capacitor values are indicated in microfarads unless otherwise specified. (p=micro-microfarads)

CAUTION

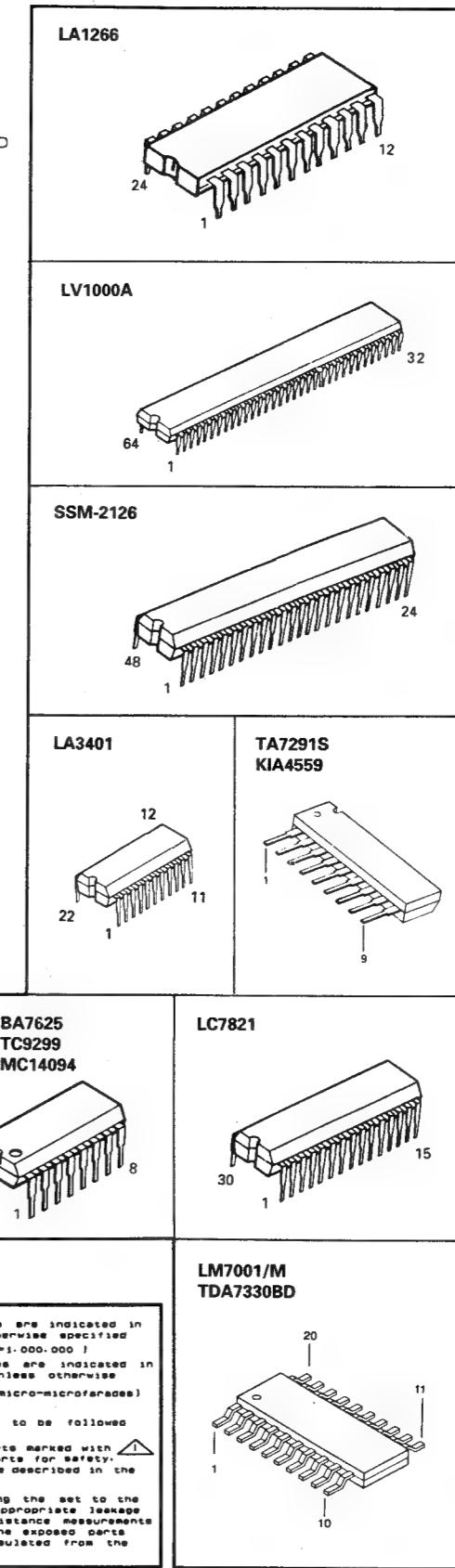
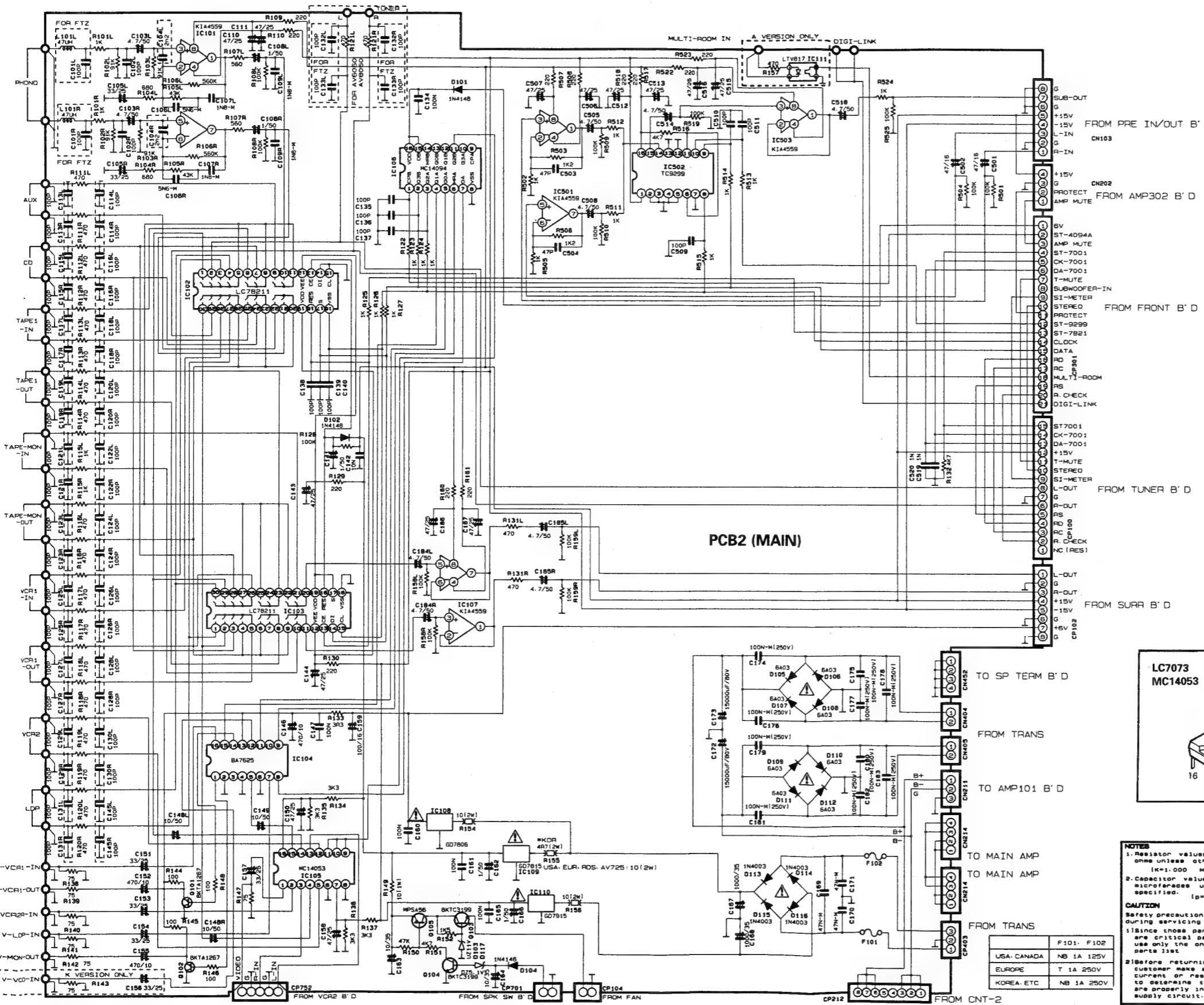
Safety precaution to be followed during servicing

! Since those parts marked with ! are critical parts for safety, use only the one described in the parts list

! Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

SCHEMATIC DIAGRAM (II)

Model No. : R-725/RDS · AV-725



NOTES

- 1. Resistor values are indicated in ohms unless otherwise specified
 1K=1,000 M=1,000,000 !
- 2. Capacitor values are indicated in microfarads unless otherwise specified (p=picomicrofarads)

CAUTION

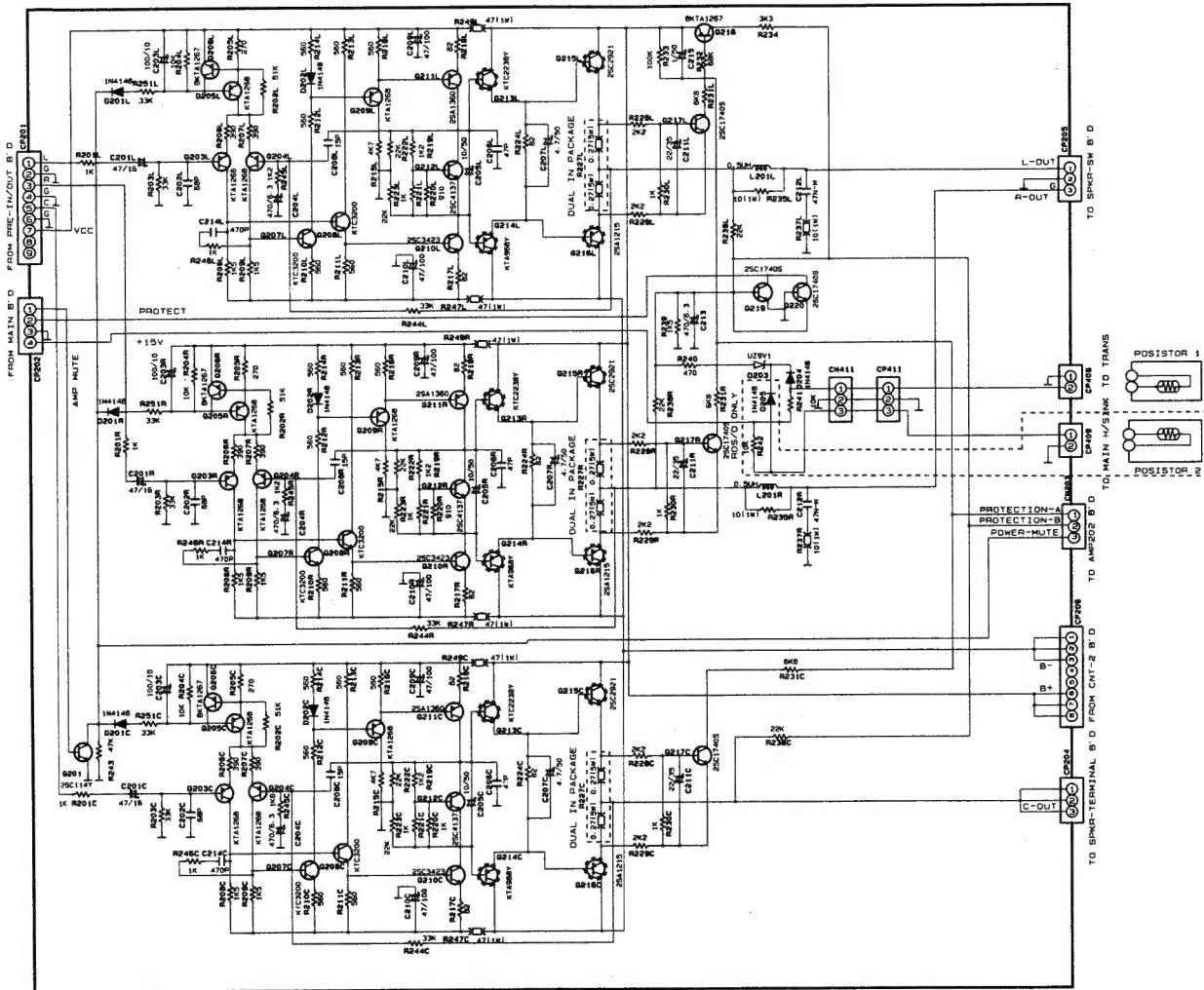
Safety precaution to be followed during servicing

- 1) Since these parts marked with  are critical parts for safety, use only the one described in the parts list.
- 2) Before returning the set to the customer, make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

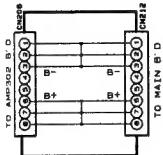
SCHEMATIC DIAGRAM (III)

Model No. : R-725/RDS · AV-725

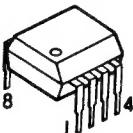
PCB3 (AMP 302)



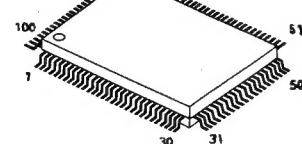
CNT-2 B'D



KIA4559P
NJM2068D



CXP82840

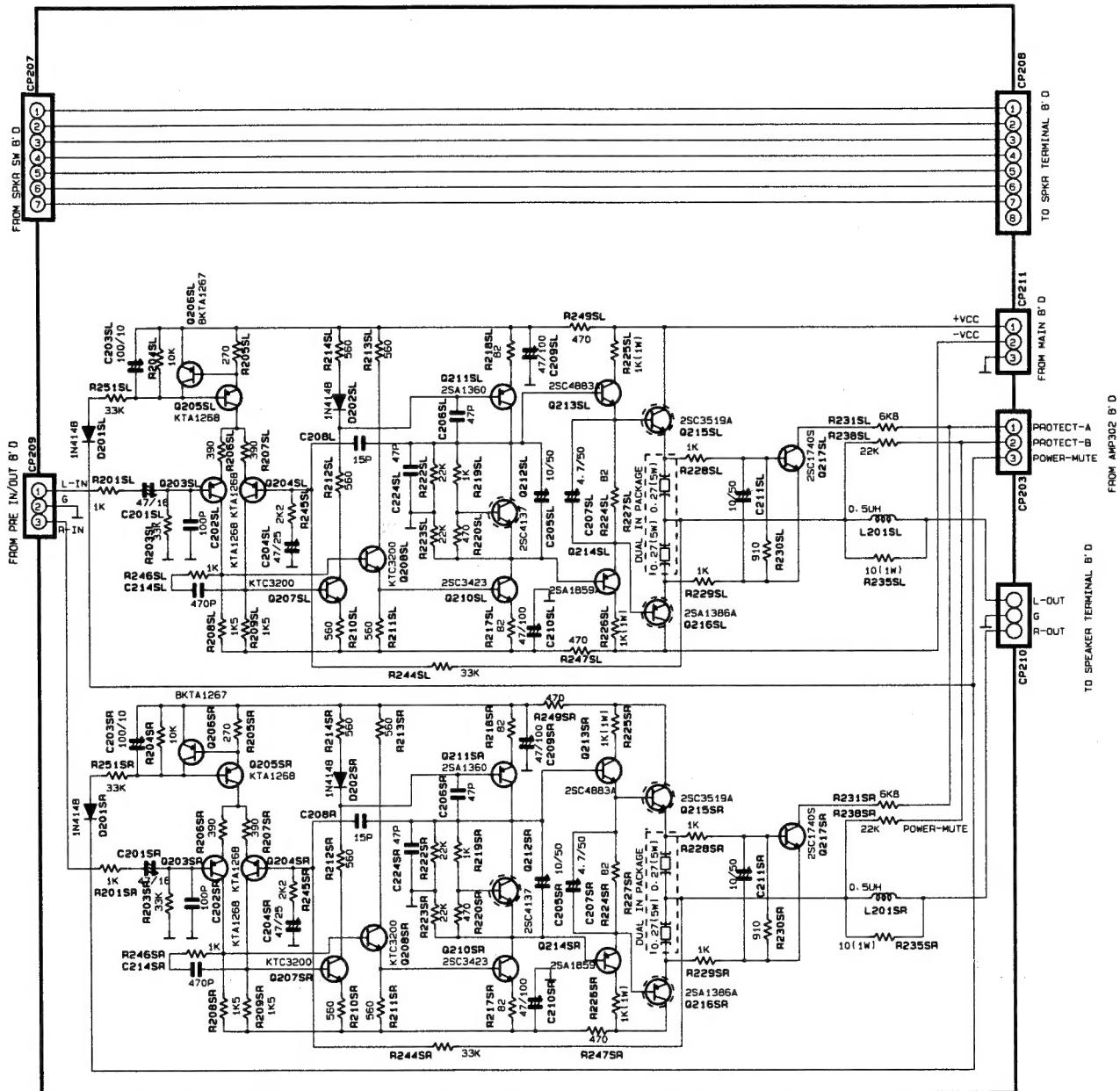


KIA7806/GD7806 KIA7815/KIA7915 2SA1859A/2SC4883A	ZENER DIODE IN4003 IN4148	2SA1215, 2SC2921	2SA1360 2SC3423 2SC4137
			

SCHEMATIC DIAGRAM (IV)

Model No. : R-725/RDS · AV-725

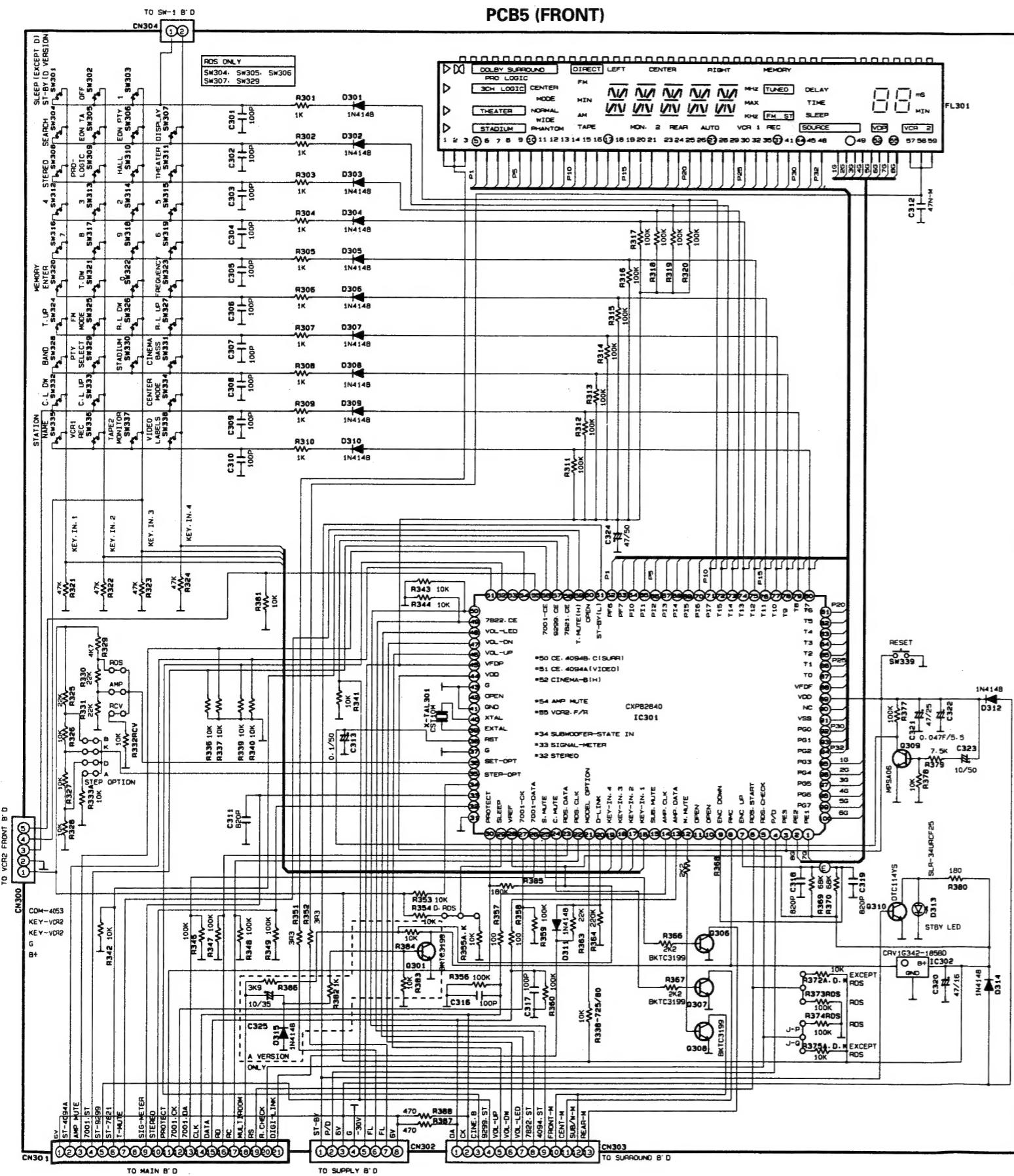
PCB4 (AMP 202)



KDA970/KTA1268 KTA1266/KTA1015Y KTC2240/KTC3200 KTC3198/KTC1815Y	KRA107M/DTA114YS DTC114YS KTD1303 KTC3199Y KTA1267 2SC1740	MPSA06 MPSA56	2SA1386Y 2SC3519Y
			

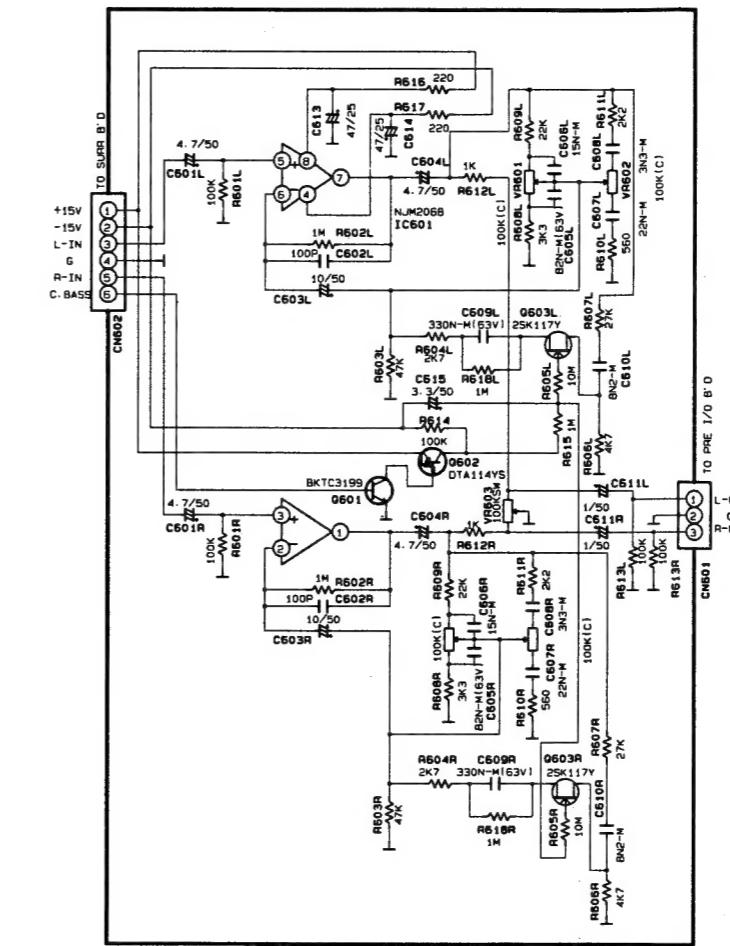
SCHEMATIC DIAGRAM (V)

PCB5 (FRONT)

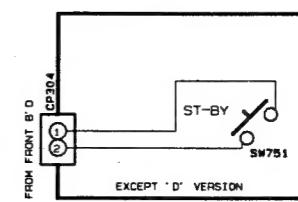


Model No. : R-725/RDS · AV-725

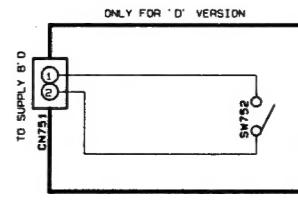
PCB6 (TONE)



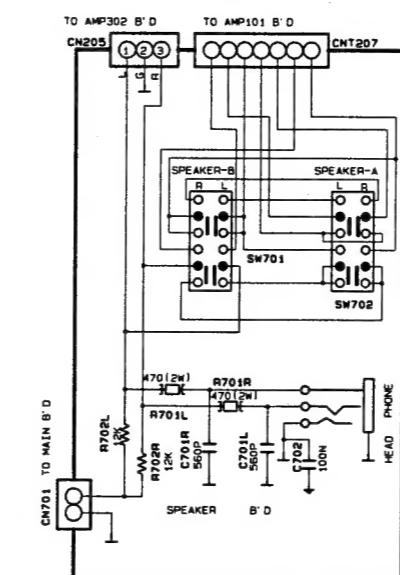
SW-1 B'D



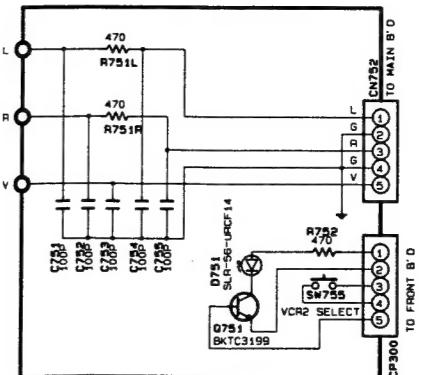
SW-2 B'D



PCB7 (SPK S/W)



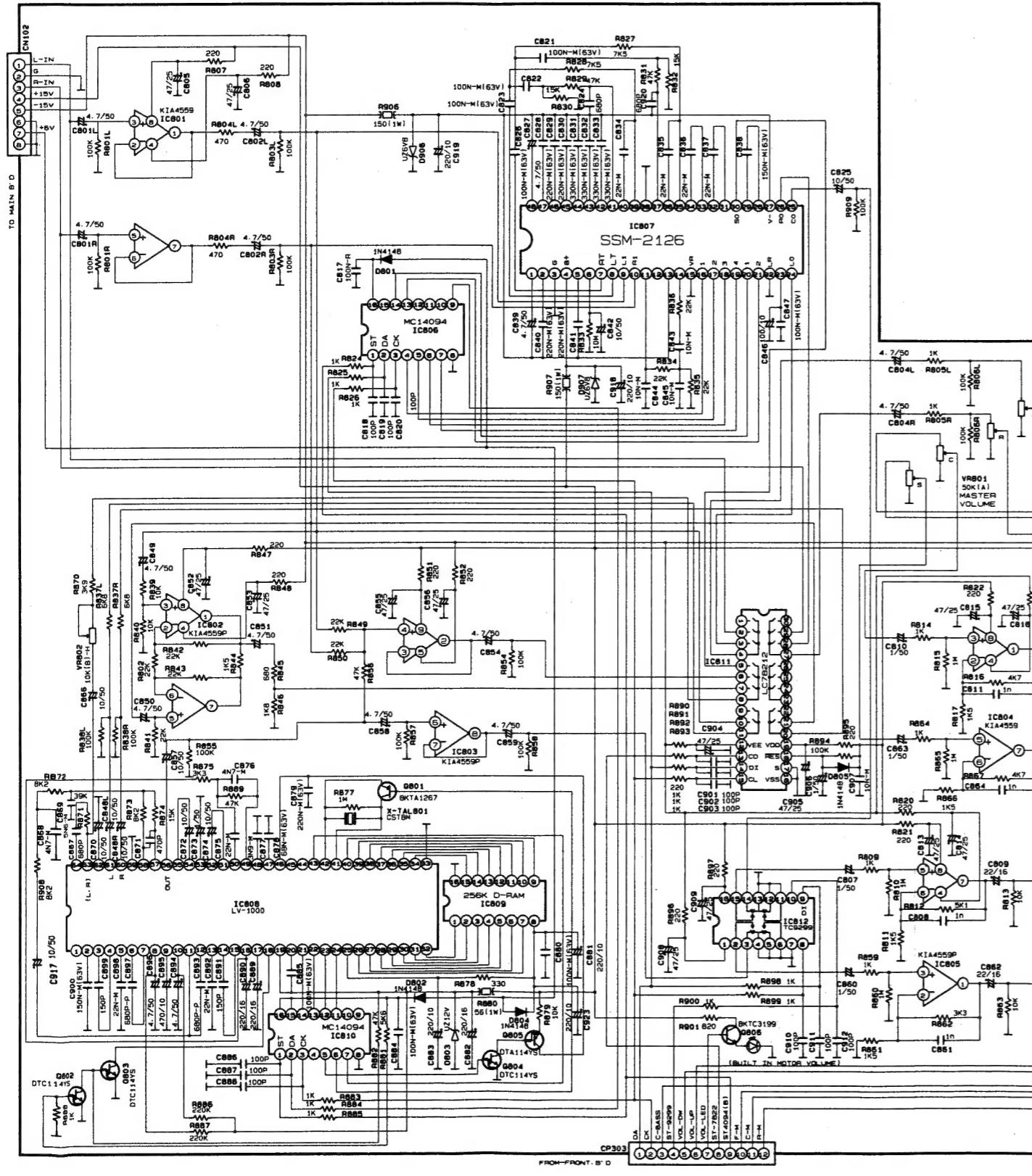
PCB8 (VCR2 FRONT)



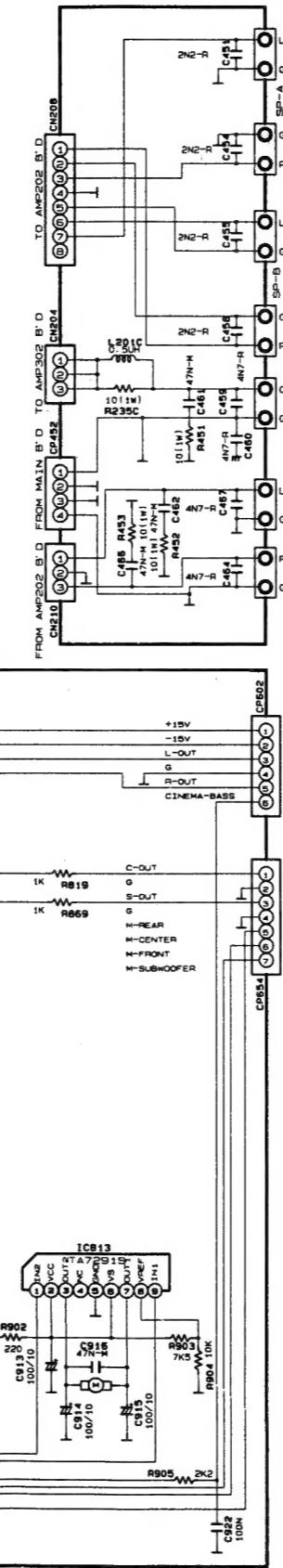
SCHEMATIC DIAGRAM (VI)

Model No. : R-725/RDS · AV-725

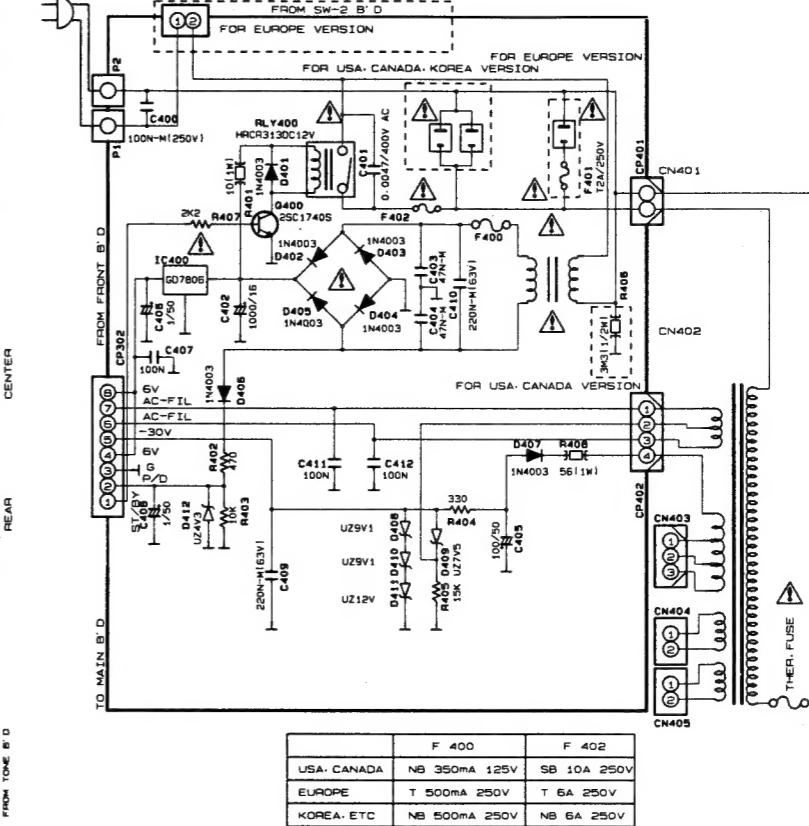
PCB12 (SURROUND)



PCB9 (SPK TERMINAL)



PCB10 (SUPPLY)



PCB11 (PRE IN/OUT)

